ORDER NO. SD7909-1622

Service Manual

SL-1200MK2

Turntable System

SL-1200MK2

(XG), (XA), (XGB)
(XAL), (E)

* The model SL-1200MK2 (XG) is available in European only.
* The model SL-1200MK2 (XA) is available in Asia, Latin America, Middle East and Africa only.
* The model SL-1200MK2 (XGB) is available in Belgium only.
* The model SL-1200MK2 (XAL) is available in Australia only.
* The model SL-1200MK2 (E) is available in Scandinavia only.

SPECIFICATIONS/ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ
DISASSEMBLY PROCEDURE/МЕТОДИКА РАЗБОРКИ
PARTS IDENTIFICATIONS/СОСТАВНЫЕ ЧАСТИ ПРОИГРЫВАТЕЛЯ ДИСКОВ
ARM BASE ASSEMBLING PROCEDURE/МЕТОДИКА СБОРКИ ТОНАРМА
ADJUSTMENTS/РЕГУЛИРОВКИ
SCHEMATIC DIAGRAM/ПРИНЦИПИАЛЬНАЯ СХЕМА
REPLACEMENT PARTS LIST (Electrical)/СПИСОК ЗАПАСНЫХ ЧАСТЕЙ (электрические)
BLOCK DIAGRAM/БЛОК-СХЕМА
ADJUSTMENTS (Electrical)/РЕГУЛИРОВКИ (электрические)
REFERENCE VOLTAGE AND WAVEFORM AT EACH IC PIN/НАПРЯЖЕНИЯ И ФОРМЫ СИГНАЛОВ НА ВЫВОДАХ МИКРОСХЕМ
EXPLODED VIEWS/ СБОРОЧНЫЕ ЧЕРТЕЖИ
REPLACEMENT PARTS LIST (Mechanical)/СПИСОК ЗАПАСНЫХ ЧАСТЕЙ (механические)

Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

SPECIFICATIONS

(Specifications subject to change without notice. Weight and dimensions shown are approximate.)

General

Power supply:	~110–120/220–240, 50 or 60 Hz
Power consumption:	13.5 W
Dimensions:	45.3 x 16.2 x 36 cm
(W x H x D)	(17-27/32" x 6-19/64" x 14-11/64")
Weight:	12.5 kg (27.6 lb)

Turntable section

Type:	Quartz direct drive Manual turntable
Drive method:	Direct drive
Motor:	Brushless DC motor
Turntable platter:	Aluminum diecast Diameter 33.2 cm (13-5/64") Weight 2 kg (4.4 lb)
Turntable speeds:	33-1/3 rpm and 45 rpm
Starting torque:	1.5 kg.cm (1.3 lb .in)
Build-up characteristics:	0.7 s. from standstill to 33-1/3 rpm
Braking system:	Electronic brake
Wow and flutter:	0.01% WRMS*
	0.025% WRMS (JIS C5521)
	±0.035% peak (IEC 98A Weighted)

* This rating refers to turntable assembly alone, excluding effects of record, cartridge or tonearm, but including platter. Measured by obtaining signal from built-in frequency generator of motor assembly.

Rumble:	–56 dB (IEC 98A Unweighted)
	–78 dB (IEC 98A Weighted)

Tonearm section

Type:	Universal
Effective length:	230 mm(9-1/16")
Arm height adjustment range:	0–6 mm
Overhang:	15 mm (19/32")
Effective mass:	12 g (without cartridge)
Offset angle:	22°
Friction:	Less than 7 mg (lateral, vertical)
Tracking error angle:	Within 2°32' (at the outer groove of 30 cm (12") record
Stylus pressure	Within 0°32' (at the inner groove of 30 cm (12") record
adjustment range:	0–2.5 g
Applicable cartridge	
weight range:	6–10 g
	13.5–17.5 g (including headshell)
(with auxiliary	
weight):	9.5–13 g
	17–20.5 g (including headshell)
(with shell weight)	3.5–6.5 g
	11–14 g (including headshell)
Headshell weight:	7.5 g

Cartridge section

Model No.	EPC-207C
Type:	Moving magnet
Frequency response:	20 Hz to 25 kHz
	20 Hz to 15 kHz ±2 dB
Output voltage:	3 mV at 1 kHz
	5 cm/s. zero to peak lateral velocity
	[8.5 mV at 1 kHz 10 cm/s. zero to peak 45° velocity (DIN 45500)]
Channel separation:	25 dB at 1 kHz
Channel balance:	Within 2 dB at 1 kHz
Compliance (dynamic):	10 x 10^6 cm/dyne at 100Hz
Stylus pressure:	1.75 ±0.25 g (17.5 ±2.5 mN)
Load impedance:	47 kΩ to 100 kΩ
Weight:	5.6 g (cartridge only)
Replacement stylus:	EPS-207ED
	(Elliptical stylus)

■ DISASSEMBLY PROCEDURE

How to remove panel cover

1. Remove head shell and turntable.
2. Secure arm with arm clamp.
3. Remove 5 screws Ⓐ of the panel cover as shown in Fig. 1.

How to remove stater frame coil and F.G detector coil

4. Remove 3 connectors Ⓑ and 2 read wires Ⓒ from power transformer as shown in Fig. 2.
5. Remove 3 screws Ⓓ of the drive circuit board and 3 screws Ⓔ of the stater frame cover as shown in Fig. 2.
6. Disconnect 18 soldered parts Ⓕ of the stater coil and 4 soldered parts Ⓖ of the F.G detector coil as show in Fig. 3.
7. Remove 3 screws Ⓗ of the stater frame ass'y as shown in Fig. 3.

How to remove bottom base ass'y

8. Remove 4 audio insulators. **(Counterclockwise rotation)**
9. Remove 17 screws and spacer Ⓘ as show in Fig. 4.
10. Remove 11 screws Ⓙ as shown in Fig. 4.

How to remove stylus-illuminator lamp

11. Remove 2 screws Ⓚ of the stylus-illuminator lamp ass'y as shown in Fig. 5.
12. Remove 1 screw Ⓛ as shown in Fig. 6.

How to remove neon-illuminator L.E.D.

13. Remove 4 screws Ⓜ as shown in Fig. 5.
14. Remove 1 circlip Ⓝ and switch cam Ⓞ as shown in Fig. 5.
15. Remove strobo-illuminator case.

How to remove tone arm

16. Remove 4 screws Ⓟ of the arm base cover as shown in Fig. 5.
17. Remove 2 screws Ⓠ of the phono cord clamper as shown in Fig. 5.
18. Remove phono cord clamper as shown in Fig. 7.
19. Remove 2 screws Ⓡ of the phono cord p.c.b. as shown in Fig. 8.
20. Remove 2 screws Ⓢ as shown in Fig. 8.
21. Remove 2 screws Ⓣ of the silicon oil dumper as shown in Fig. 8.
22. Remove 3 screws Ⓤ as shown in Fig. 8.
23. Remove 2 screws Ⓧ of the tone arm as shown in Fig. 9.

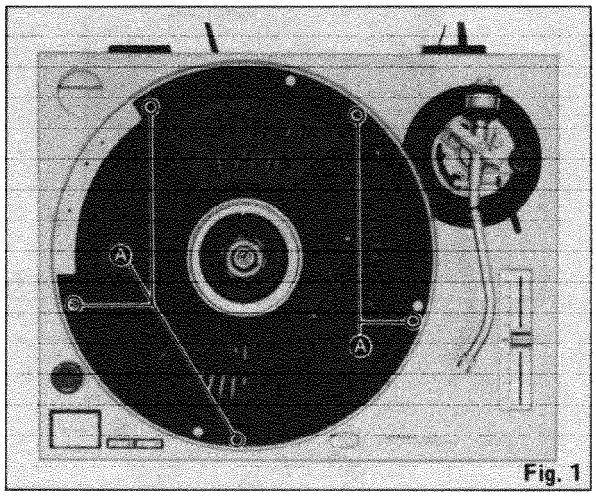


Fig. 1

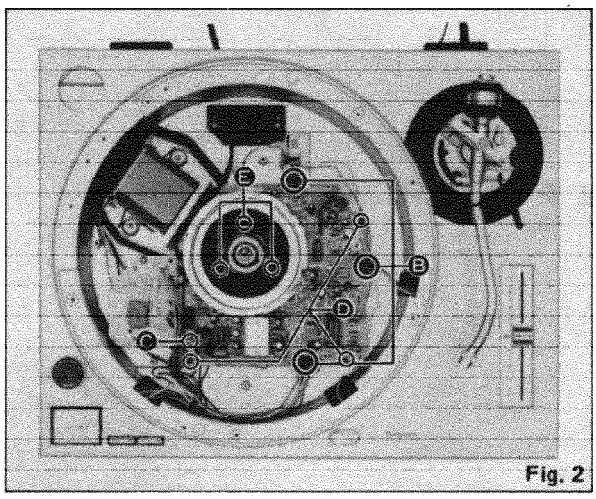


Fig. 2

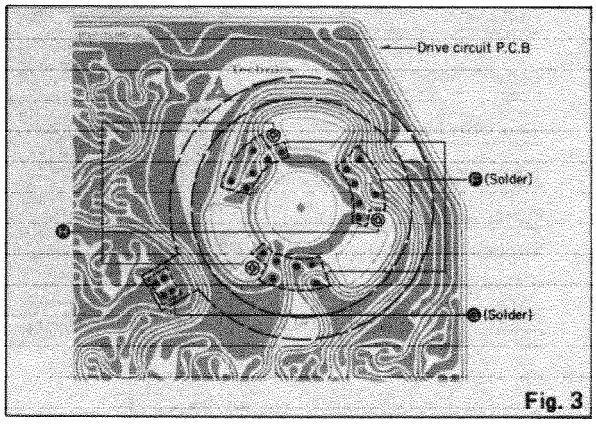


Fig. 3

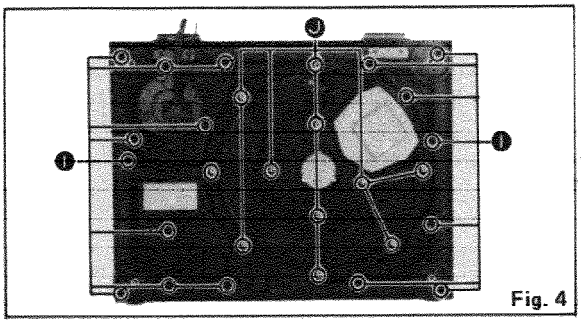


Fig. 4

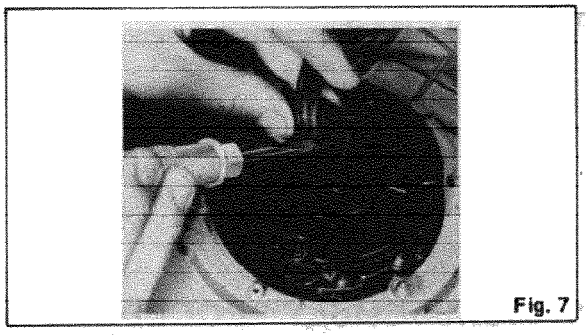


Fig. 7

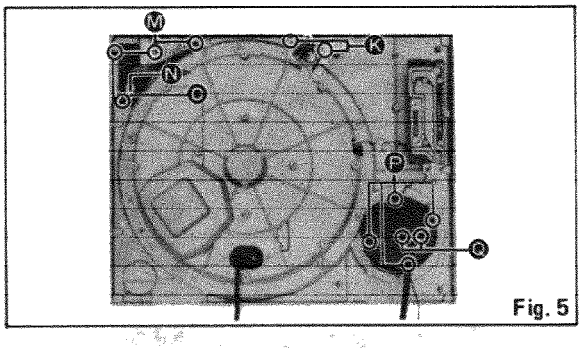


Fig. 5

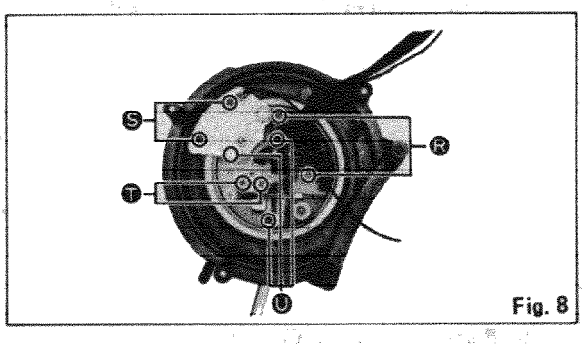


Fig. 8

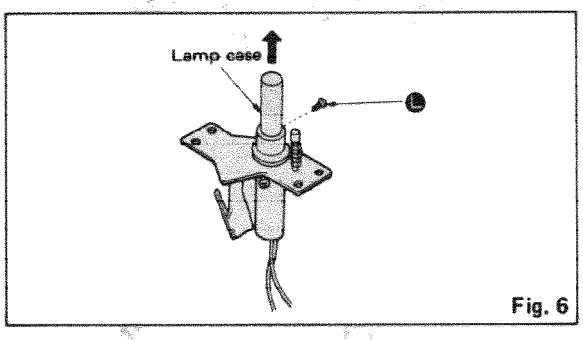


Fig. 6

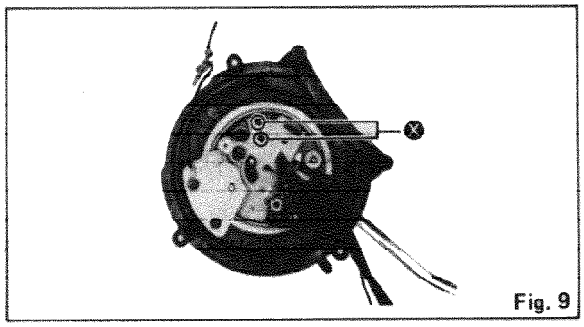
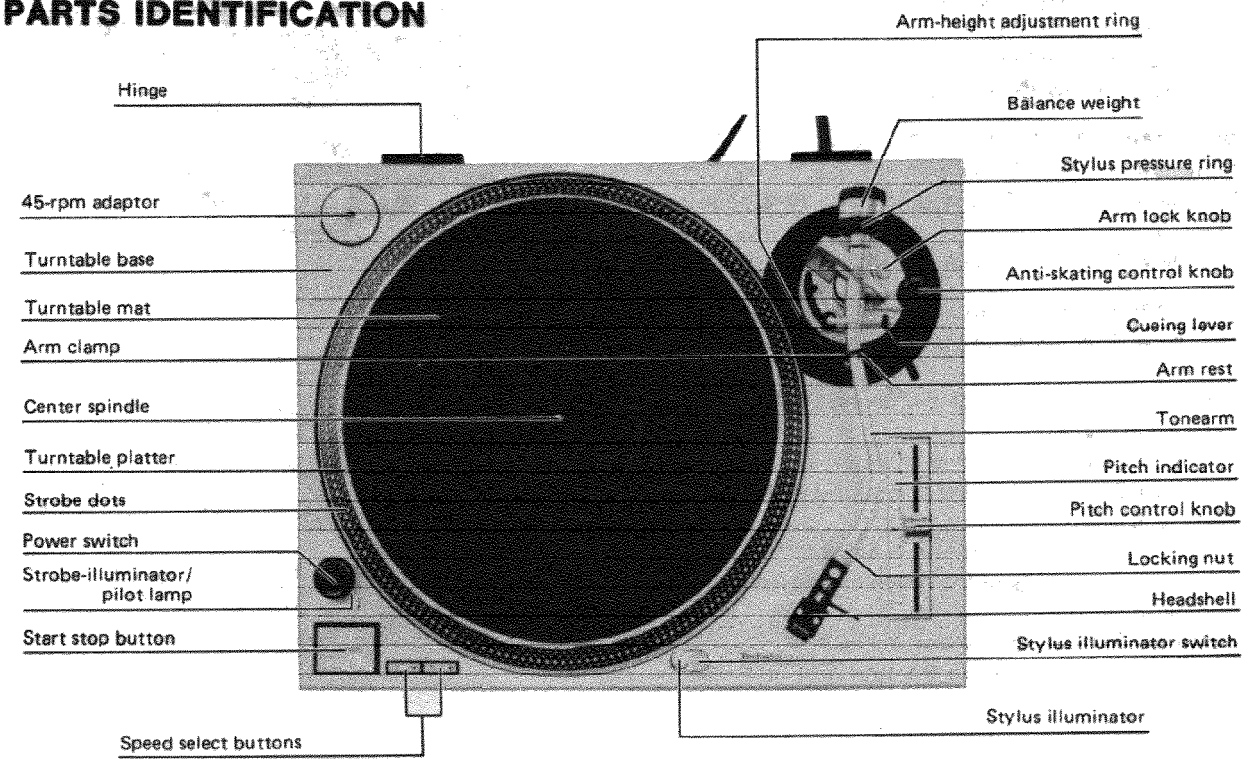


Fig. 9

■ PARTS IDENTIFICATION



■ ARM BASE ASSEMBLING PROCEDURE

1. Attach the control ring to the arm base seat. (The control ring should be roated counterclockwise.)
2. Completely tighten the control ring, and then loosen it 1.5~2.5 turns to set the scale to "3". (See Fig. 11)

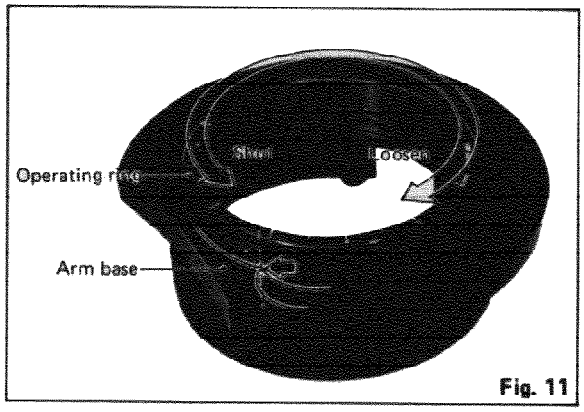


Fig. 11

3. Hold the arm base and set the red line mark on the arm base to the scale near "2", then turn the arm base clockwise. (See Fig. 12)
   Note:
   Take care not to allow deflection of the predetermined positions of the control ring and arm base seat.

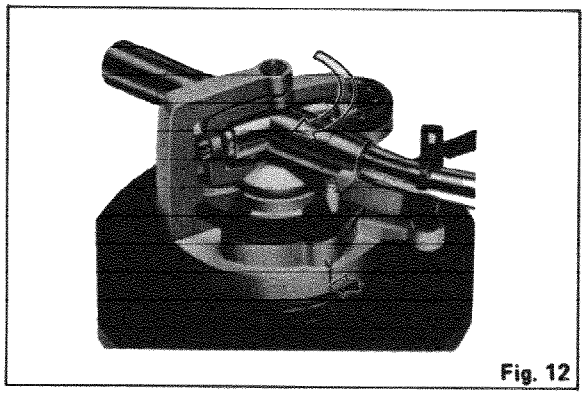


Fig. 12

4. Adjust the arm base so that the red line mark on the arm base is set to the scale "3" of the control ring. Next, secure the positioning base plate with two setscrews. (See Fig. 13)

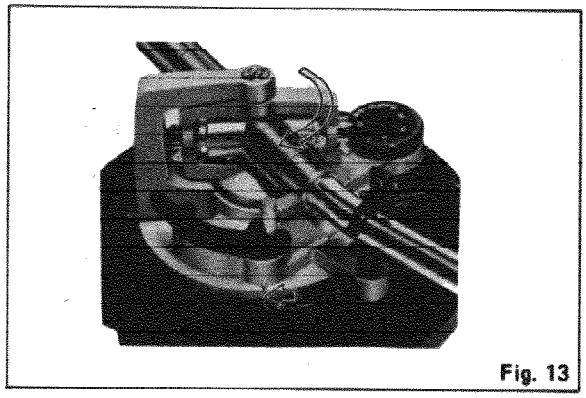


Fig. 13

5. Rotate the control ring and make sure that the arm base shifts within the range of 0~6mm. (See Figs. 14 and 15) If it does not shift within the specified range, the arm base position is deflected. In that case, disassemble the parts and check as specified in step 3.

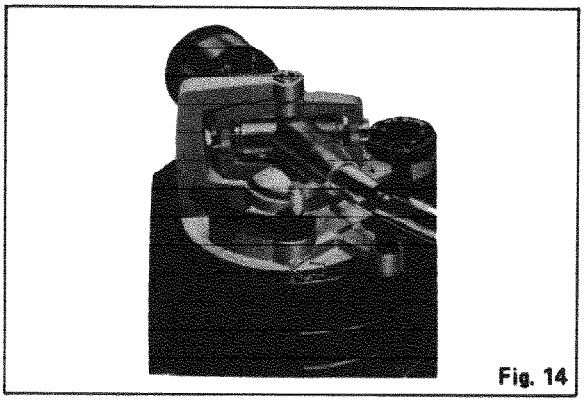


Fig. 14

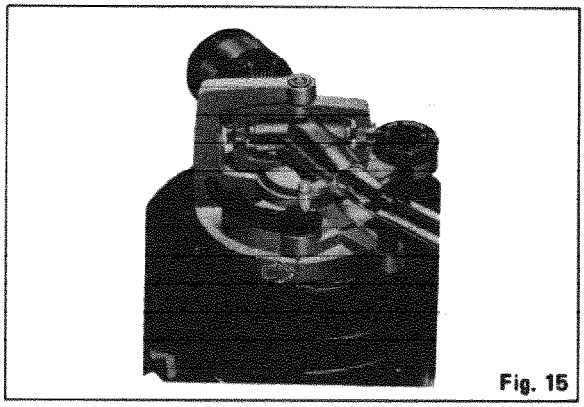


Fig. 15

■ ADJUSTMENT OF CANCELLER SPRING POSITION

If the arm body or PU base plate is replaced, be sure to set the canceller knob to "0.5" and make sure that the canceller spring is in contact with the arm shaft. (See Fig. 16)
If the canceller spring is deflected, adjust it as follows:

1. Clamp the arm on the rest.
2. Set the canceller knob to "0.5".
3. Remove the PU base plate, adjust gear Ⓐ so that the canceller spring is in the position of Fig. 16.
4. Mount the PU base plate onto the arm base and check the spring position.

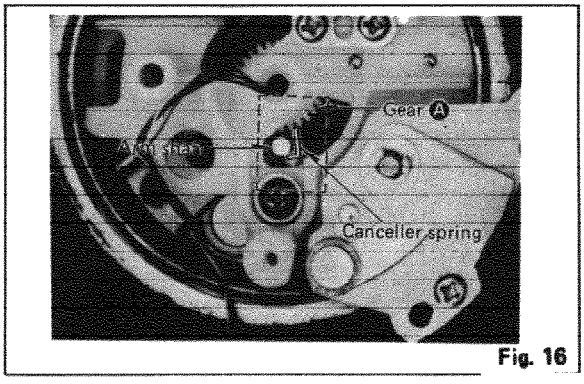


Fig. 16

■ ADJUSTMENTS

Pitch control (fine adjustment of speed) (See Figs. 18 and 19.)

When the pitch control knob is located at the center of the position after turning on the power, the green LED indicator is lit showing the operating condition for the predetermined speed (either 33-1/3 or 45 rpm). The pitch control is variable in a range of about ±8%

Adjustment should be done on the basis of indicator scale. Figures on the indicator show approximate percentages for variable pitch control.

When the strobe dots in 4 stages marked at the peripheral edge of the turntable appear to be stationary, variation of individual pitches is shown. **(See Fig. 19.)**

Note:

The strobe-illumination of this unit employs a strobe-illuminator LED synchronized with the precise quartz frequency.

For fine adjustment of the turntable speed, be sure to effect the adjustment according to the LED illumination.

The LED illumination is not synchronized with fluorescent lamps.

Adjustment of arm-lift height (See Figs. 20 and 21.)

The arm-lift height (distance between the stylus tip and record surface when cueing lever is raised) has been adjusted at the factory before shipping to approximately 8-13mm.

If the clearance becomes too narrow or too wide, turn the adjustment screw clockwise or counterclockwise, while pushing the arm lift down.

Clockwise rotation

—distance between the record and stylus tip is decreased.

Counterclockwise rotation

—distance between the record and stylus tip is increased.

Note:

As the adjusting screw has hexagonal head, be sure to make the adjustment while depressing the arm lift, or the screw will not move freely.

Also be sure that the hexagonal head retracts correctly into the arm lift when the latter is released.

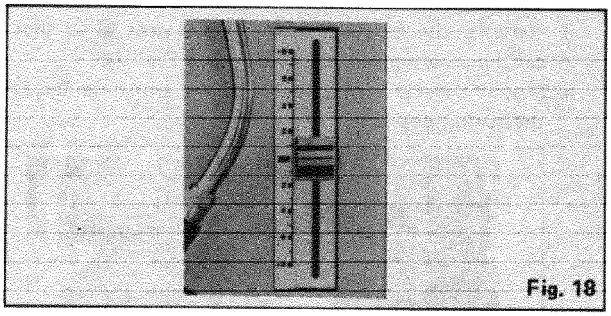


Fig. 18

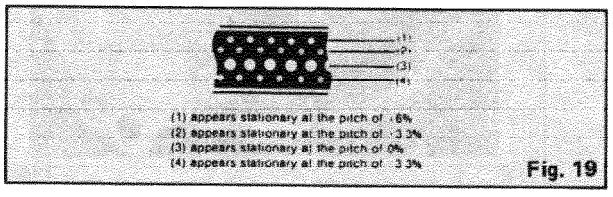

(1) appears stationary at the pitch of +6%
(2) appears stationary at the pitch of +3.3%
(3) appears stationary at the pitch of 0%
(4) appears stationary at the pitch of -3.3%

Fig. 19

Adjustment of the tonearm height (See Fig. 22.)

The height of the tonearm can be adjusted up to 6 mm, and a scale is provided on the adjust ring in 0.5 mm increments. Be sure to set the proper arm height using the adjust ring scale and referring to the table.

Height of cartridge (mm) (H)	Scale reading on the arm-height adjust ring
15	0
16	1
17	2
18	3
19	4
20	5
21	6

For example, if the cartridge height is 17.5 mm, the arm-height adjust ring should be positioned at the intermediate location between 2 and 3 on the scale. **(See Fig. 22.)**

Caution:

Be sure to lock the tonearm by turning the arm lock knob in the direction indicated by the arrow after finishing the height adjustment for the tonearm.

Lubrication (See Fig. 23.)

Apply 2 or 3 drops of oil once after every 2000 hours of operation.

The time interval is much longer than that for conventional type motors (200-500 hours).

Please purchase original oil. **(Part number is SFWO 010.)**

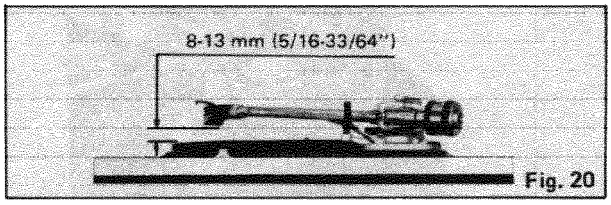


Fig. 20

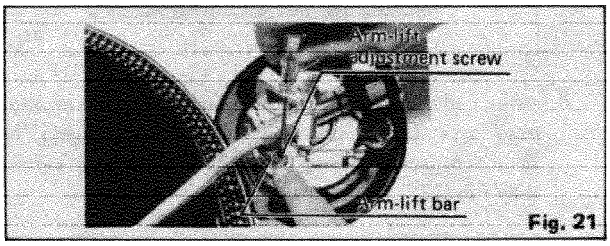


Fig. 21

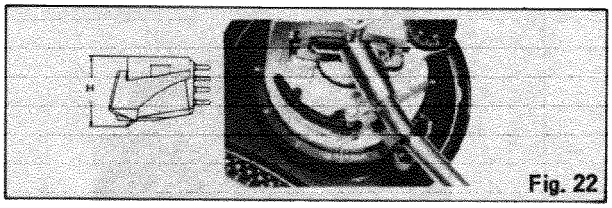


Fig. 22

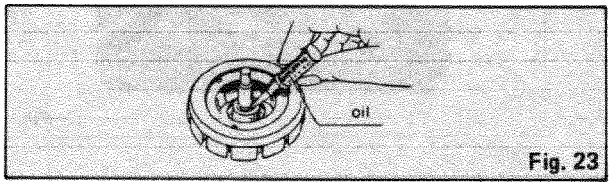
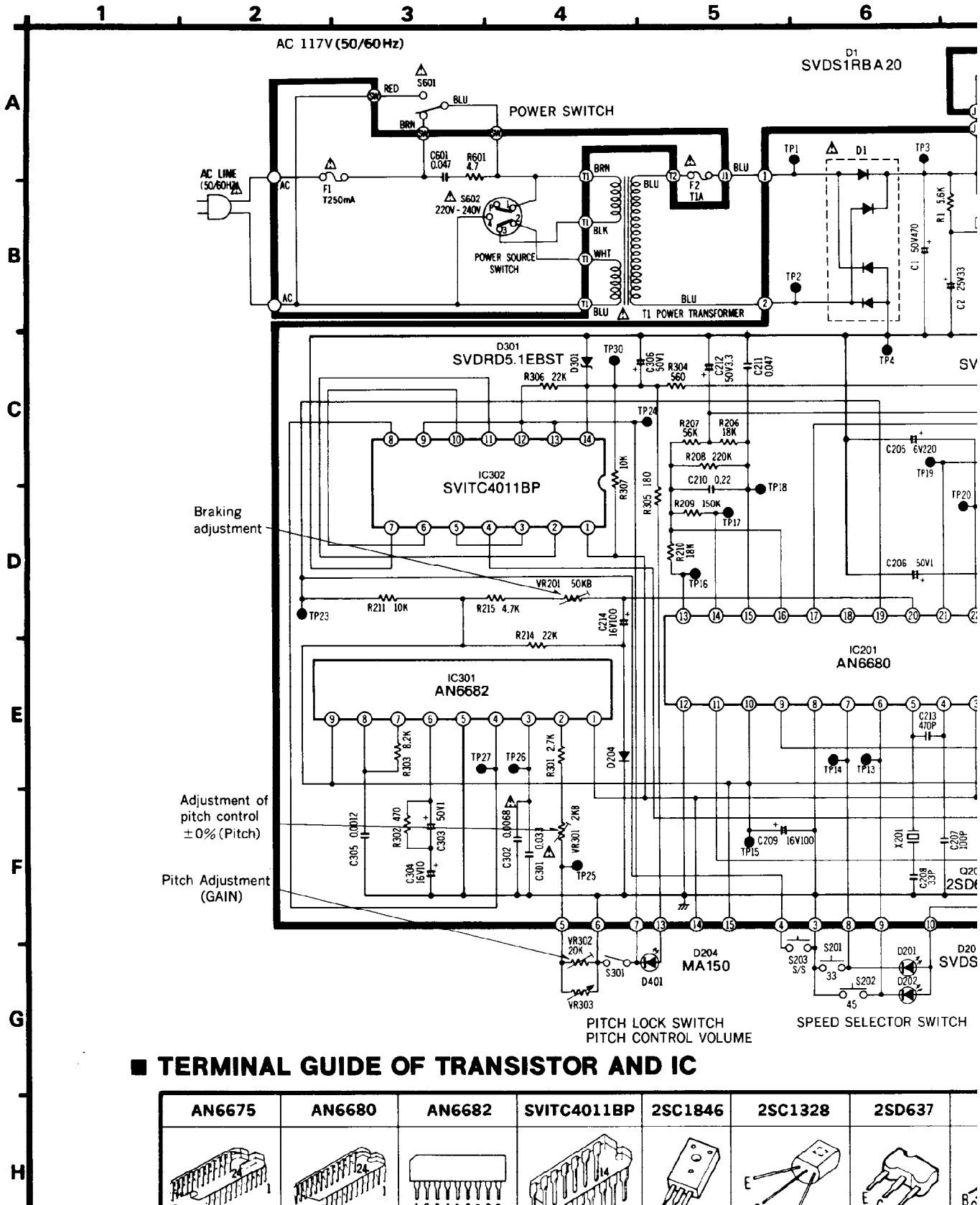


Fig. 23

Schematic Diagram (This schematic diagram may be modified at any time with the develo



■ TERMINAL GUIDE OF TRANSISTOR AND IC

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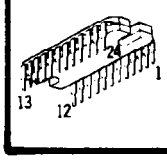
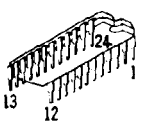
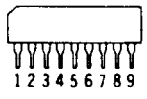
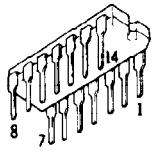
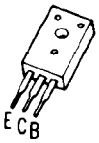
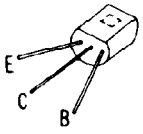
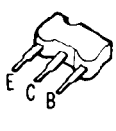
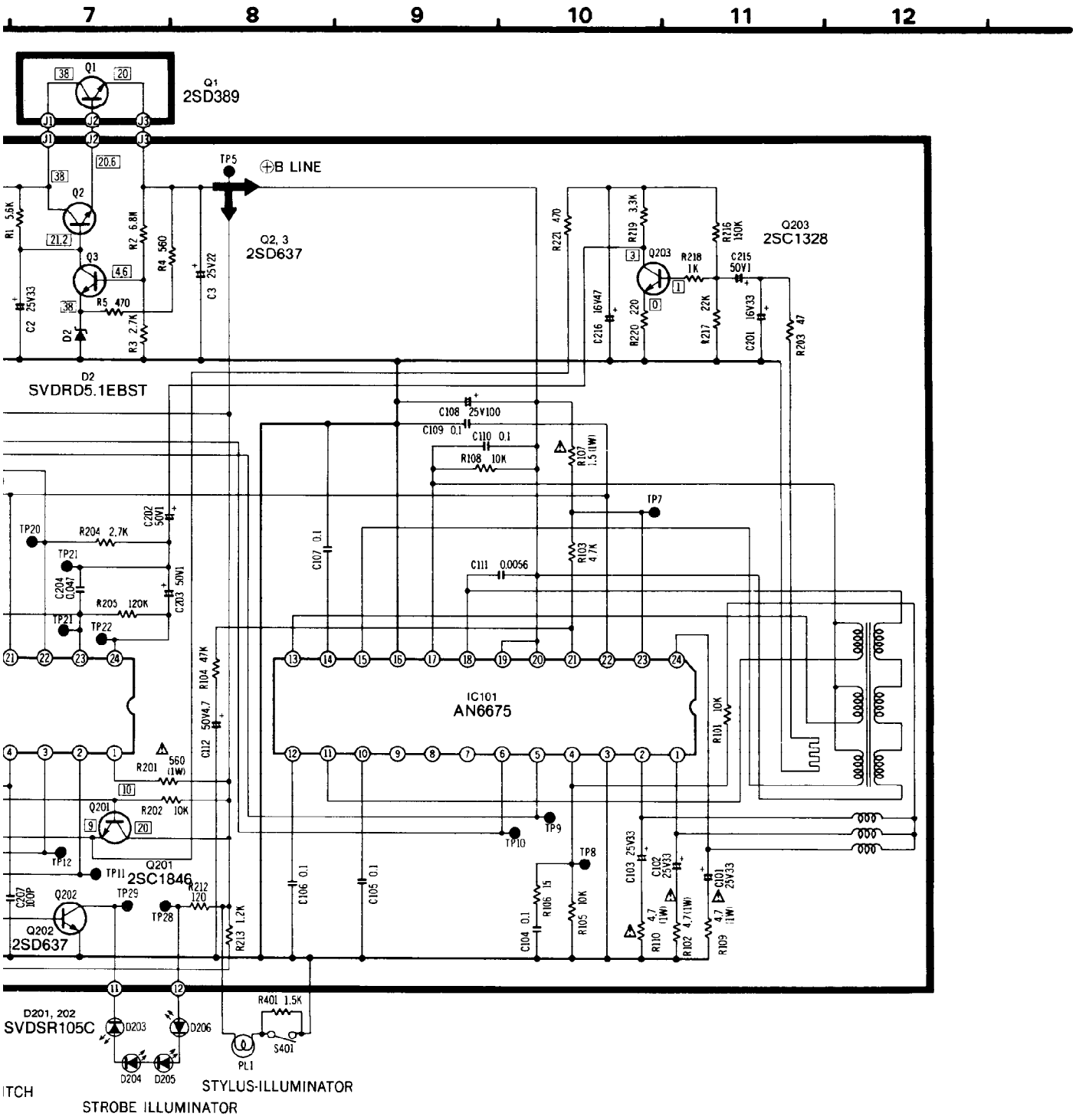
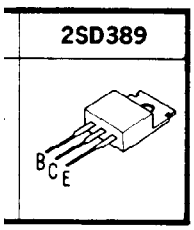
						

evelopment of new technology.)





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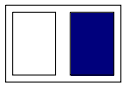
NOTE:

1. **S201:** Speed selector switch (33-1/3 r.p.m.) in "**ON**" position. (push condition)
2. **S202:** Speed selector switch (45 r.p.m.) in "**OFF**" position. (not-push condition)
3. **S203:** Start/Stop switch in "**OFF**" position. (not-push condition)
4. **S301:** Pitch lock switch in "**ON**" position. (center position)
5. **S401:** Stylus-illuminator switch in "**OFF**" position.
6. **S601:** Power switch in "**ON**" position.
7. **S602:** Power source switch in "**220–240V**" position.
8. The drive circuit IC voltage and wave form are not indicated in side the schematic diagram.
9. Indicated voltage valuse are the standard values for the unit measured by DC electronic circuit tester (high impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
10. ⚠ indicates that only parts specified by the manufactuer be used for safety.



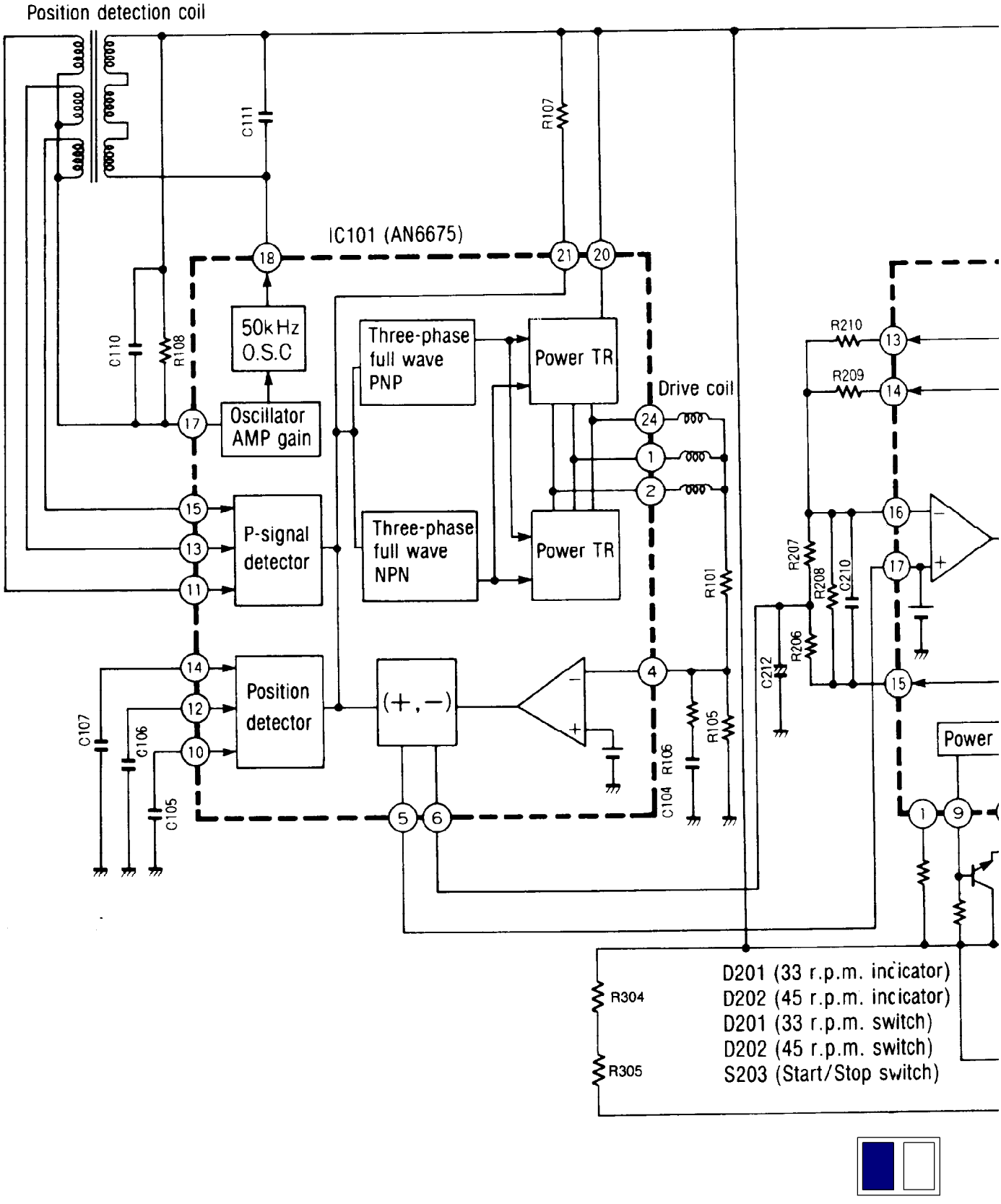
REPLACEMENT PARTS LIST (Electrical)

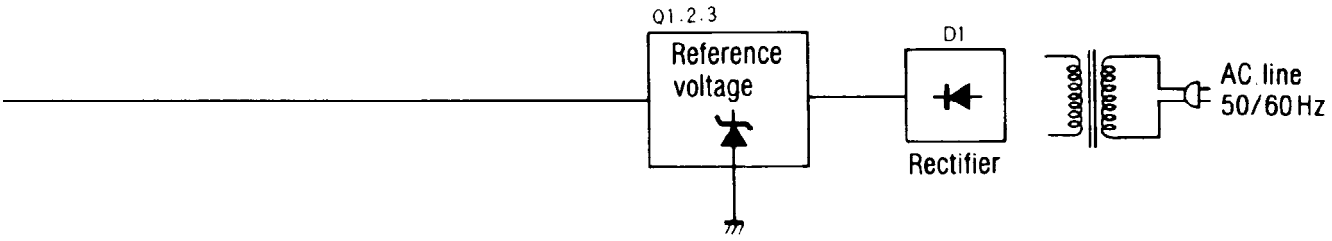
Notes: 1. Part numbers are indicated on most mechanical parts.
Please use this number for parts orders.
2. ⚠ indicates that only parts specified by manufacturer be used for safety.
3. SL-1200MK2 (XG) ⟶ [XG], SL-1200MK2 (XA) ⟶ [XA], SL-1200MK2 (XGB) ⟶ [XGB]
SL-1200MK2 (XAL) ⟶ [XAL], SL-1200MK2 (E) ⟶ [E]

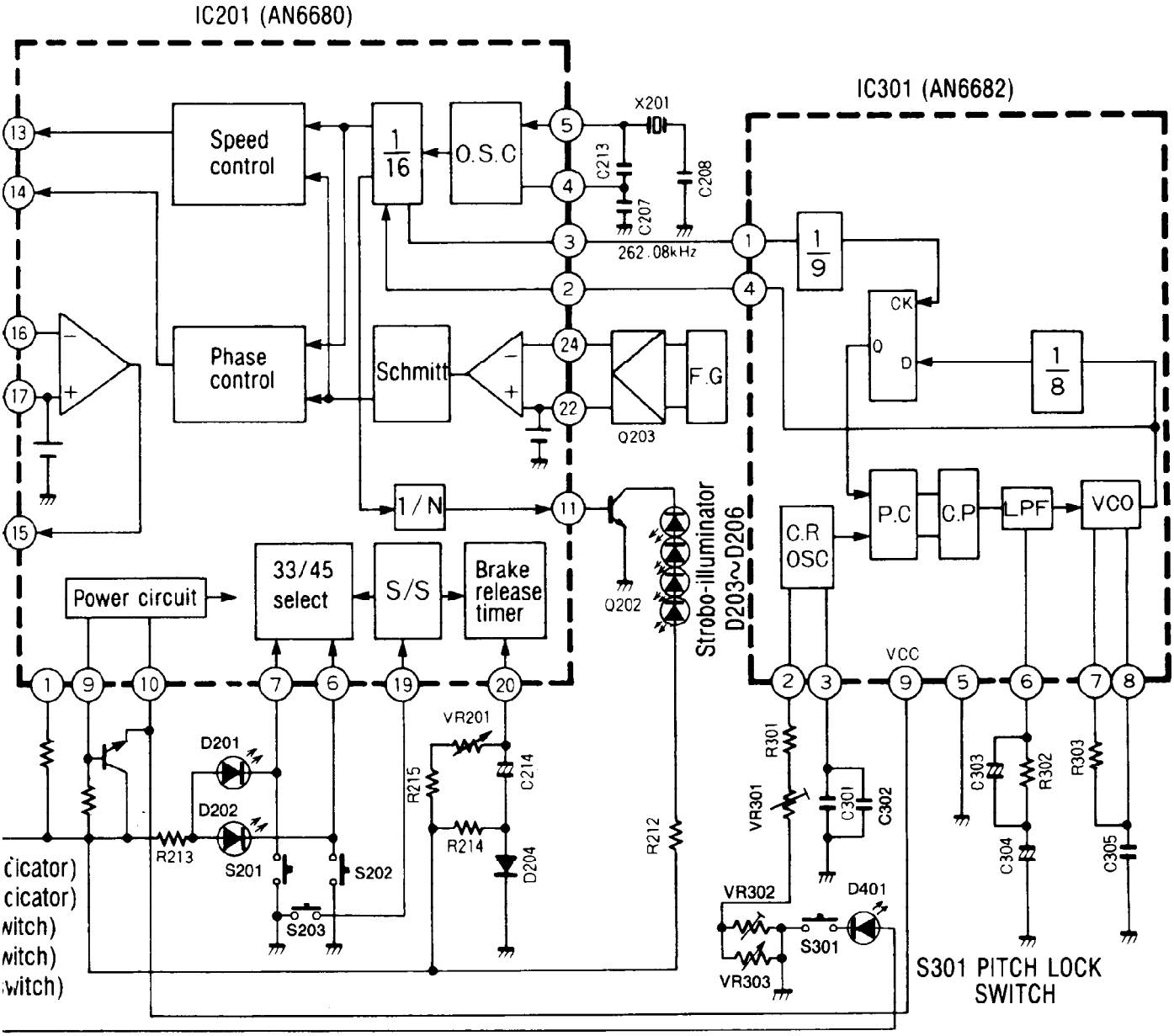
Ref. No.		Part No.	Part Name & Description
INTEGRATED CIRCUITS			
IC101		AN6675	Integrated Circuit
IC201		AN6680	Integrated Circuit
IC301		AN6682	Integrated Circuit
IC302		SVITC4011BP	Integrated Circuit
TRANSISTORS			
Q1		2SD389A-Q	Transistor
Q2, 3, 202		2SD637	Transistor
Q201		2SC1846-R	Transistor
Q203		2SC1328-T	Transistor
DIODES			
D1	⚠	**SVDS1RBA40**	Rectifier
D2, 301		**MA1051**	Diode, Zener 5.1V
D204		**MA182A**	Diode
D201, 202		SVDSR-105C	Light Emitting Diode
D203~206		SVDEBR5505S	Light Emitting Diode
D401		SVDGL-9PG2	Light Emitting Diode
CRYSTAL			
X201		SVQU306115	Crystal, 4.19328MHz Oscillator
VARIABLE RESISTORS			
VR201		EVLS3AA00B54	Braking Adjustment (BRAKE), 50kΩ (B)
VR301		EVMH1GA00B23	Adjustment of Pitch Control ±0%(PITCH), 5kΩ (B)
VR302		EVLS6AA00B54	Pitch Adjustment (Gain) 50kΩ
VR303		EVBJ05C19ABE	Pitch Control Volume
SWITCHES			
S201		EVQP5R04K	Switch, Speed Selector (33-1/3 r.p.m.)
S202		EVQP5R04K	Switch, Speed Selector (45 r.p.m.)
S203		SFDSSS5GL13C	Switch, Start/Stop
S401		SFDSD2MSL-4	Switch, Stylus-illuminator
S601	⚠	SFDSSS5GL13S	Switch, Power
S602	⚠	SFDSHXW01317	Switch, Power Source
LAMP			
PL1		SFDN122-01	Lamp, Stylus-illuminator
TRANSFORMER			
T1	⚠	SLTF5900	Power Transformer
FUSE			
F1	⚠	XBA2C025TIA	Fuse, T250 mA
F2	⚠	XBA2C10TRO	Fuse, T1A
RESISTORS			
R1		**ERD25FJ562**	Carbon, 5.6kΩ, 1/4W, ± 5%
R2		**ERD25FJ682**	Carbon, 6.8kΩ, 1/4W, ± 5%
R3		**ERD25FJ272**	Carbon, 2.7kΩ, 1/4W, ± 5%
R4		**ERD25FJ561**	Carbon, 560Ω, 1/4W, ± 5%
R5		**ERD25FJ471**	Carbon, 470Ω, 1/4W, ± 5%
R101		**ERD25FJ103**	Carbon, 10kΩ, 1/4W, ± 5%
R102	⚠	ERX1ANJ4R7	Metal Film, 4.7Ω, 1W, ± 5%
R103		**ERD25FJ472**	Carbon, 4.7kΩ, 1/4W, ± 5%
R104		**ERD25TJ473**	Carbon, 47kΩ, 1/4W, ± 5%
R105		**ERD25FJ103**	Carbon, 10kΩ, 1/4W, ± 5%
R106		**ERD25FJ150**	Carbon, 15Ω, 1/4W, ± 5%

Ref. No.		Part No.	Part Name & Description
R107	⚠	ERX1ANJ1R5	Metal Film, 1.5Ω, 1W, ± 5%
R108		**ERD25FJ103**	Carbon, 10kΩ, 1/4W, ± 5%
R109, 110	⚠	ERX1ANJ4R7	Metal Film, 4.7Ω, 1W, ± 5%
R201	⚠	ERG1ANJ561	Metal Oxide, 560Ω, 1W, ± 5%
R202		**ERD25FJ103**	Carbon, 10kΩ, 1/4W, ± 5%
R203		**ERD25FJ470**	Carbon, 47Ω, 1/4W, ± 5%
R204		**ERD25FJ272**	Carbon, 2.7kΩ, 1/4W, ± 5%
R205		**ERD25TJ124**	Carbon, 120kΩ, 1/4W, ± 5%
R206		**ERD25TJ183**	Carbon, 18kΩ, 1/4W, ± 5%
R207		**ERD25TJ563**	Carbon, 56kΩ, 1/4W, ± 5%
R208		**ERD25TJ224**	Carbon, 220kΩ, 1/4W, ± 5%
R209		**ERD25TJ154**	Carbon, 150kΩ, 1/4W, ± 5%
R210		**ERD25TJ183**	Carbon, 18kΩ, 1/4W, ± 5%
R211		**ERD25FJ103**	Carbon, 10kΩ, 1/4W, ± 5%
R212		**ERD25FJ121**	Carbon, 120Ω, 1/4W, ± 5%
R213		**ERD25FJ122**	Carbon, 1.2kΩ, 1/4W, ± 5%
R214		**ERD25TJ223**	Carbon, 22kΩ, 1/4W, ± 5%
R215		**ERD25FJ472**	Carbon, 4.7kΩ, 1/4W, ± 5%
R216		**ERD25TJ154**	Carbon, 150kΩ, 1/4W, ± 5%
R217		**ERD25TJ223**	Carbon, 22kΩ, 1/4W, ± 5%
R218		**ERD25FJ102**	Carbon, 1kΩ, 1/4W, ± 5%
R219		**ERD25FJ332**	Carbon, 3.3kΩ, 1/4W, ± 5%
R220		**ERD25FJ221**	Carbon, 220Ω, 1/4W, ± 5%
R221		**ERD25FJ471**	Carbon, 470Ω, 1/4W, ± 5%
R301		ERO25CKF3301	Metal Film, 3.3kΩ, 1/4W, ± 1%
R302		**ERD25FJ471**	Carbon, 470Ω, 1/4W, ± 5%
R303		**ERD25FJ822**	Carbon, 8.2kΩ, 1/4W, ± 5%
R304		**ERD25FJ152**	Carbon, 1.5kΩ, 1/4W, ± 5%
R306		**ERD25TJ223**	Carbon, 22kΩ, 1/4W, ± 5%
R601		**ERD25FJ4R7**	Carbon, 4.7Ω, 1/4W, ± 5%
CAPACITORS			
C1		**ECEB1HS471**	Electrolytic, 470μF, 50V
C2		**ECEA1VS330**	Electrolytic, 33μF, 35V
C3		**ECEA1ES220**	Electrolytic, 22μF, 25V
C101, 102		**ECEA1VS330**	Electrolytic, 33μF, 35V
C103		**ECEA1VS330**	Electrolytic, 33μF, 35V
C104, 105		ECQM1H104KZ	Polyester, 0.1μF, 50V, ±10%
C106, 107		ECQM1H104KZ	Polyester, 0.1μF, 50V, ±10%
C108		**ECEA1ES101**	Electrolytic, 100μF, 25V
C109, 110		ECQM1H104KZ	Polyester, 0.1μF, 50V, ±10%
C111		ECQM1H562KZ	Polyester, 0.0056μF, 50V, ±10%
C112		**ECEA1JS4R7**	Electrolytic, 4.7μF, 63V
C201		**ECEA1CS330**	Electrolytic, 33μF, 16V
C202, 203		**ECEA50Z1**	Electrolytic, 1μF, 50V
C204		ECQM1H473KZ	Polyester, 0.047μF, 50V, ±10%
C205		**ECEA1AS221**	Electrolytic, 220μF, 10V
C206		**ECEA50Z1**	Electrolytic, 1μF, 50V
C207		ECCD1H101K	Ceramic, 100pF, 50V, ±10%
C208		ECCD1H390K	Ceramic, 39pF, 50V, ±10%
C209		**ECEA1ES101**	Electrolytic, 100μF, 16V
C210		ECQM1H224KZ	Polyester, 0.22μF, 50V, ±10%
C211		ECQM1H473KZ	Polyester, 0.047μF, 50V, ±10%
C212		**ECEA50Z3R3**	Electrolytic, 3.3μF, 50V
C213		ECCD1H471K	Ceramic, 470pF, 50V, ±10%
C214		**ECEA1ES101**	Electrolytic, 100μF, 25V
C215		**ECEA50Z1**	Electrolytic, 1μF, 50V
C216		**ECEA1ES470**	Electrolytic, 47μF, 25V
C301, 302	⚠	ECQK1123FZ	Polyester, 0.012μF, 125V, ± 1%
C303		**ECEA50Z1**	Electrolytic, 1μF, 50V
C304		**ECEA1HS100**	Electrolytic, 10μF, 50V
C305		ECQM1H122KZ	Polyester, 0.0012μF, 50V, ±10%
C306		**ECEA50Z1**	Electrolytic, 1μF, 50V
C601		ECNC4A473M	Paper, 0.047μF, 400V, ±20%

BLOCK DIAGRAM

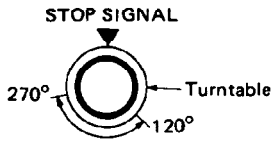



Q1.2.3
Reference voltage
D1
Rectifier
AC line
50/60Hz


IC201 (AN6680)
IC301 (AN6682)
Speed control
1/16
O.S.C
X201
C213
C207
C208
262.08kHz
1/9
Phase control
Schmitt
F.G
Q203
1/N
Q202
Strobo-illuminator
D203~D206
CK
D
1/8
C.R OSC
P.C
C.P
LPF
VCO
Power circuit
33/45 select
S/S
Brake release timer
VCC
VR201
D201
D202
R213
S201
S202
S203
R215
R214
C214
D204
R212
R301
VR301
C301
C302
VR302
VR303
D401
S301
S301 PITCH LOCK SWITCH
C303
R302
C304
R303
C305
cicator)
cicator)
witch)
witch)
witch)

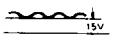
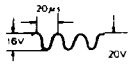
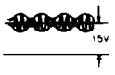
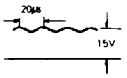
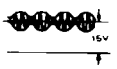
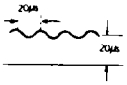
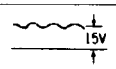
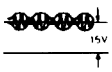
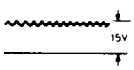
ADJUSTMENT (Electrical)

Notes: • Make the following adjustments after replacing parts such as IC's, transistors, diodes, etc.
- Condition of the set.
  1. Power switch ..... ON
  2. Pitch control ..... Center position
  3. Speed selector switch ..... 33-1/3 r.p.m.
- Instruments to be used
  1. Tester
  2. Frequency counter

	Adjustment	Connection Points	Adjustment Point	Adjustment Method
A	Adjustment of pitch control ±0% (PITCH)	Frequency counter ⊕ — TP27 ⊖ — GROUND	VR301	1. Pitch control switch to center position. 2. Adjust VR301 for 262.08 kHz ±0.05 kHz of frequency.
B	Adjustment of pitch control gain	Tester TP31 and TP32	VR302	Adjust VR302 for 2.7 kΩ ±0.1 of resistance value
C	Braking adjustment (BRAKE)	–	VR201	Adjust VR201 for complete stop within 120° ~ 270° after stop signal initiated. (Turntable becomes free a few seconds after stop) 

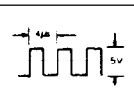
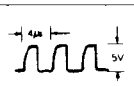
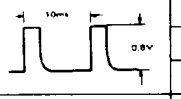
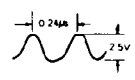
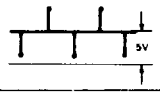
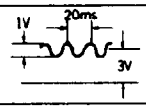
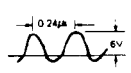
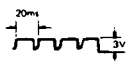
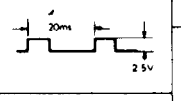
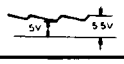
REFERENCE VOLTAGE AND WAVEFORM AT EACH IC PIN

IC101 (AN6675)

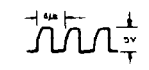
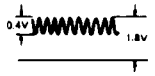
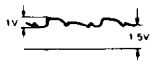
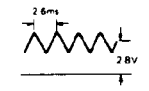
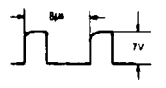
	Start	Stop		Start	Stop		Start	Stop
①	2V	2V	⑫		15V	⑱	Same as at right	
②	2V	2V						
③	0V	0V						
④	5V	5V	⑬			⑲	20V	20V
⑤	5V	5V						
⑥	5V	6.6V				⑳	20V	20V
⑦	0V	0V	⑭	15V	15V	㉑	20V	20V
⑧	5V	5V	⑮			㉒	0.2V	0.2V
⑨	0V	0V				㉓	20V	20V
⑩		15V				㉔	1.7V	1.7V
			⑯	0V	0V			
⑪			⑰	15V	15V			

SL-1200MK2

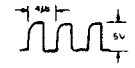
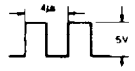
IC201 (AN6680)

	Start	Stop		Start	Stop		Start	Stop
①	2.5V	2.5V	⑧	0V	0V	⑯	5V	2.5V
②	Same as at right		⑨	9.8V	9.8V	⑰	5V	5V
			⑩	10V	10V	⑱	0V	0V
③	Same as at right		⑪	Same as at right		⑲	7.5V	0V
						⑳	0V	5V
						㉑	1.5V	0V
			⑫	0V	0V	㉒	3V	3V
④	Same as at right		⑬		0.2V	㉓		3V
⑤	Same as at right		⑭			㉔	2.8V	2.8V
⑥	3.4V	3.4V	⑮		8V			
⑦	0V	0V						

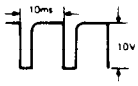
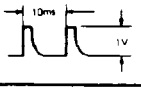
IC301 (AN6682)

	Start	Stop		Start	Stop		Start	Stop
①	Same as at right		④	Same as at right		⑧	Same as at right	
②	Same as at right		⑤	0V	0V	⑨	9V	9V
			⑥	3.9V	3.9V			
③	Same as at right		⑦	Same as at right				

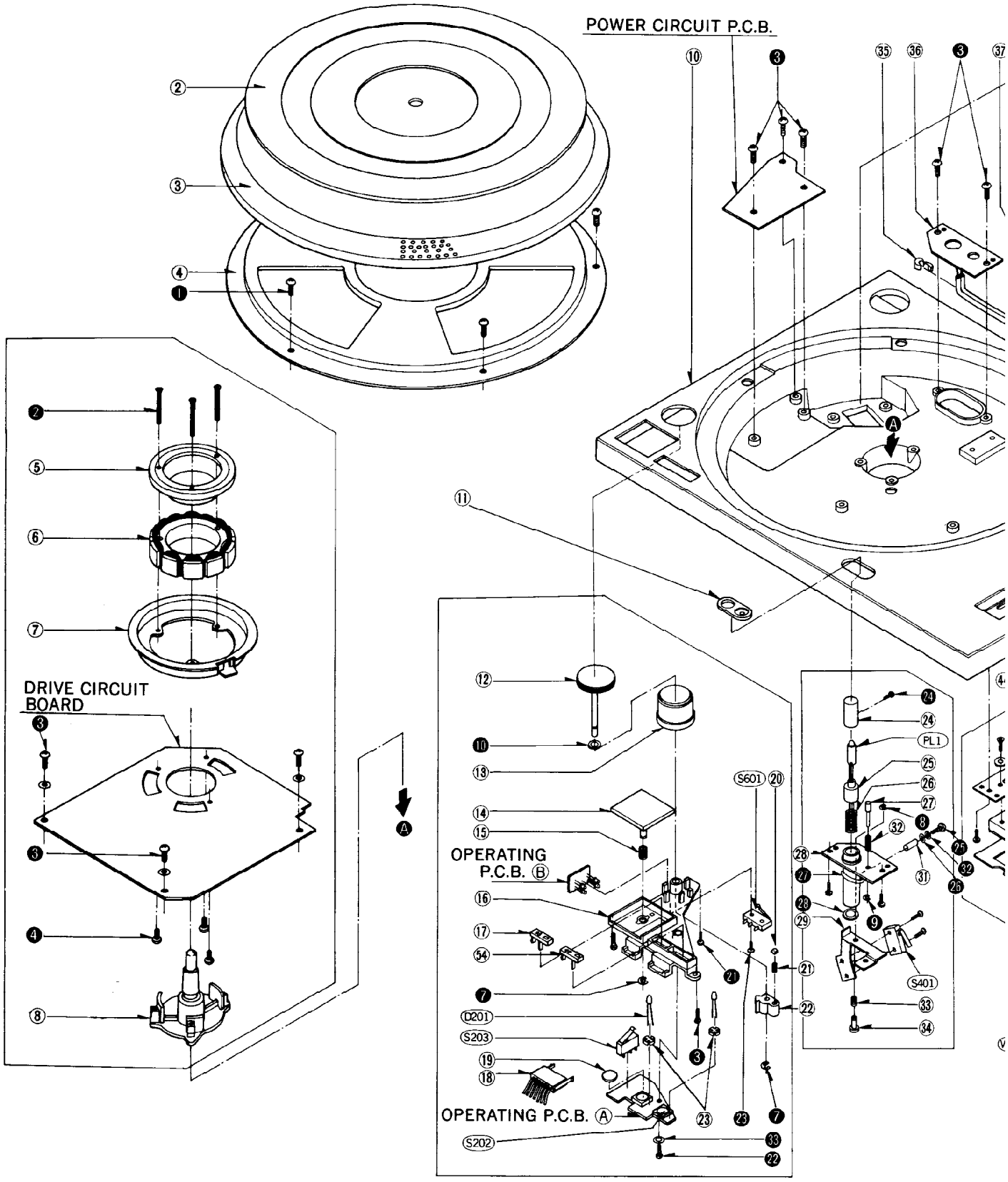
IC302 (SVITC4011BP)

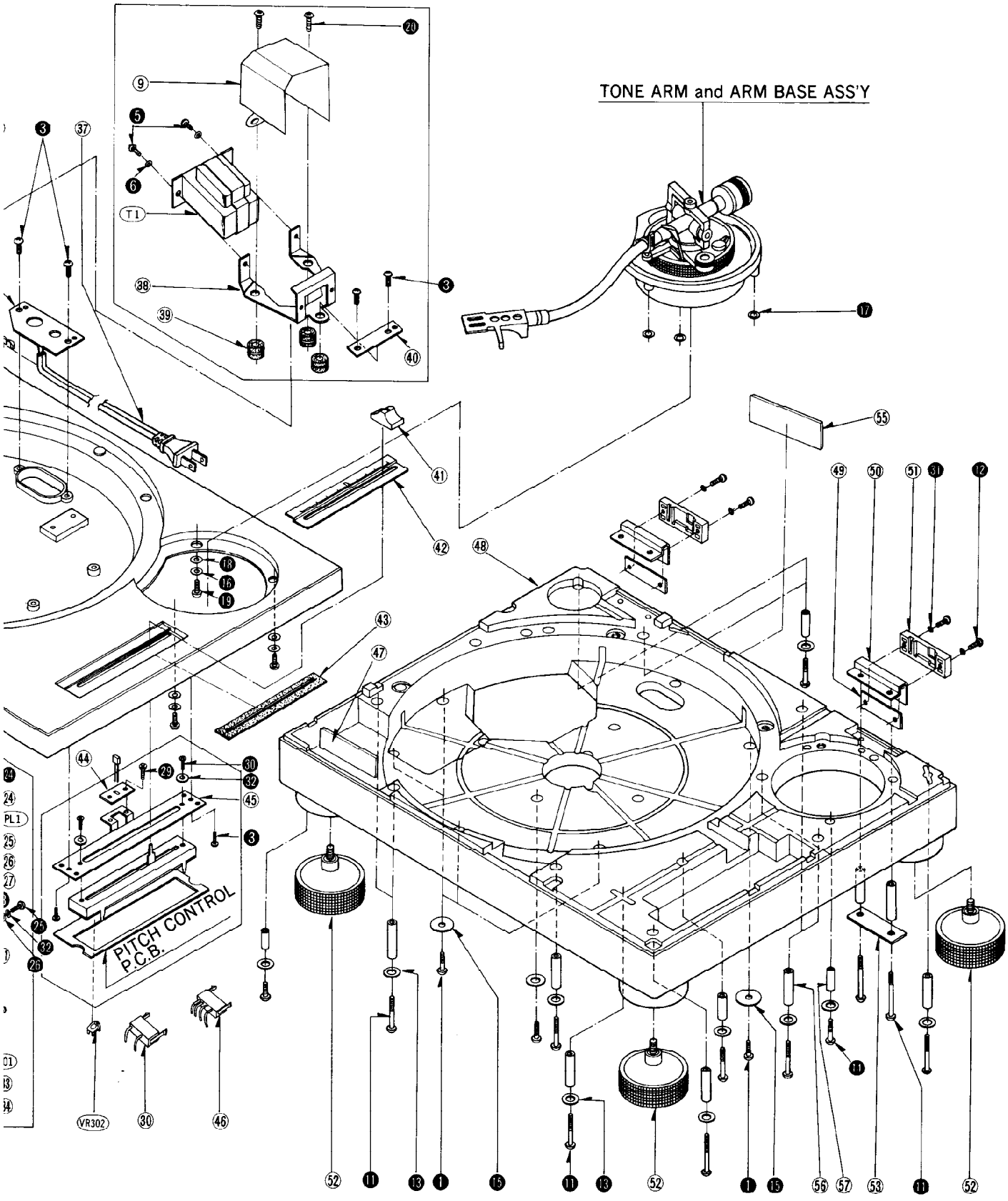
	Start	Stop		Start	Stop		Start	Stop
①	Same as at right		⑤	Same as at right		⑨	5V	5V
						⑩	5V	5V
						⑪	5V	5V
②	5V	5V	⑥	5V	5V	⑫	0.6V	0.6V
③	Same as at right		⑦	0V	0V	⑬	0.6V	0.6V
			⑧	Same as at right		⑭	5V	5V
④	5V	5V						

Q202 (2SD637)

	Start	Stop
E	0V	0V
C	Same as at right	
B	Same as at right	

■ EXPLODED VIEWS




TONE ARM and ARM BASE ASS'Y
PITCH CONTROL P.C.B.
VR302

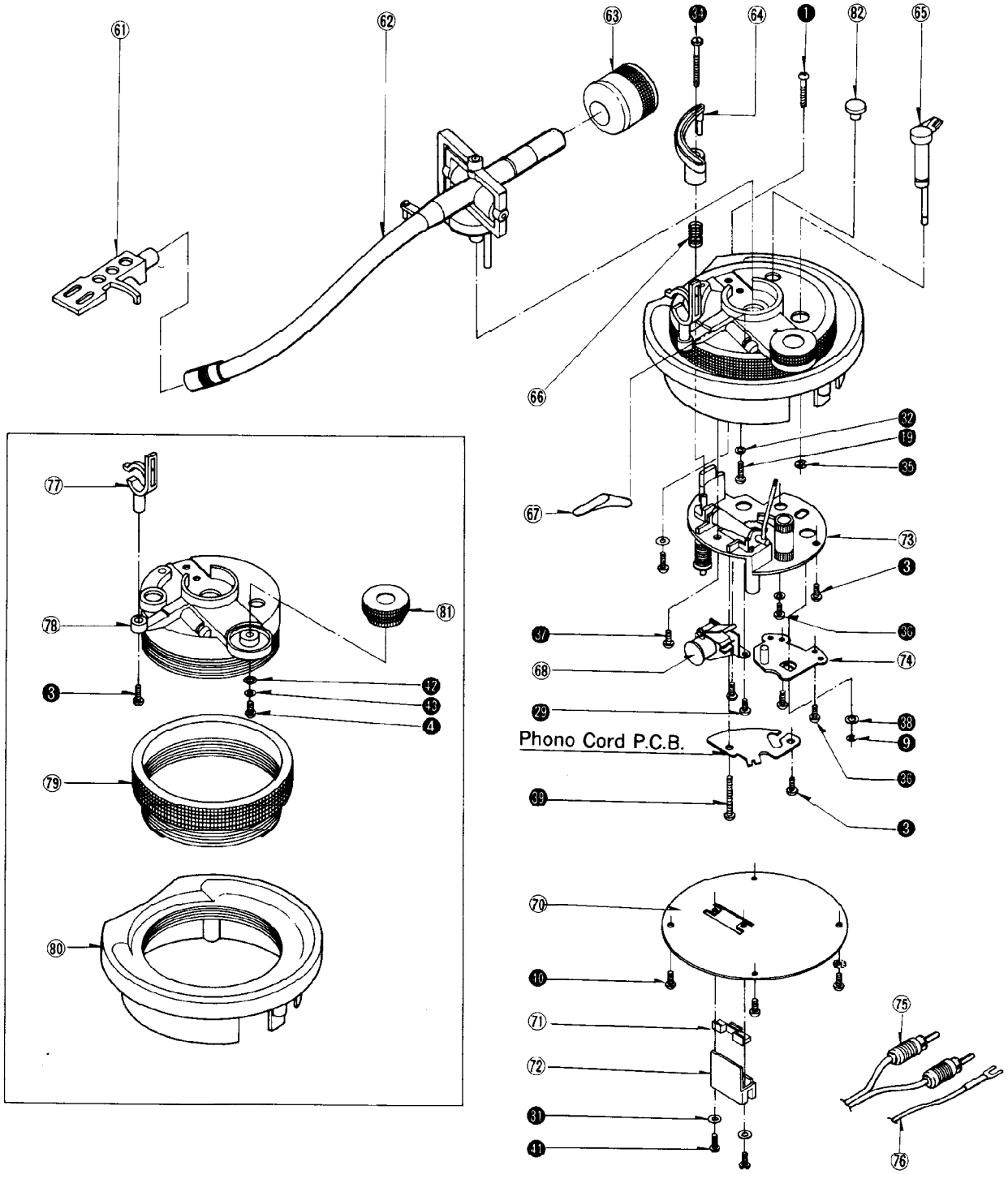
■ REPLACEMENT PARTS LIST (Mechanical)

Notes: 1. Part numbers are indicated on most mechanical parts.
Please use this number for parts orders.
2. ⚠ indicates that only parts specified by manufacturer be used for safety.
3. SL-1200MK2 (XG) ⟶ [XG], SL-1200MK2 (XA) ⟶ [XA], SL-1200MK2(XGB) ⟶ [XGB]
SL-1200MK2 (XAL) ⟶ [XAL], SL-1200MK2 (E) ⟶ [E]

Ref. No.		Part No.	Part Name & Description
CABINET and CHASSIS PARTS			
1		SFAD122-01A	Dust Cover
2		SFTG172-01	Turntable Mat
3		SFTE172-01Z	Turntable
4		SFUM172-05	Cover, Turntable
5		SFMGQ20-01	Cover, Stater Frame Ass'y
6		SFMG520-31A	Stater Frame
7		SFMZ172-01E	FG Detector Coil Ass'y
8		SFMZQ20-01A	Shaft, Stater Frame Ass'y
9		SFUP122-12	Plate, Shield
10		SFAC122-01	Cabinet
11		SFUM172-04	Ornament, Stylus-illuminator
12		SFKT122-01	Knob, Power Switch
13		SFKK122-01E	Case, Strobe-illuminator
14		SFKT015-06	Knob, Start/Stop Switch
15		SFQA122-01	Spring, Start/Stop Knob
16		SFUM122-01	Base, Operation
17		SFKT015-01E	Knob, Speed Selector (33-1/3 r.p.m.)
18		SFDJ122-02E	Connector, 7-PIN
19		SFGZ122-01	Spacer, Rubber (Speed Selector)
20		SFYB5-32	Ball, Switch Cam
21		SFQA520-01	Spring, Switch Cam
22		SFUM122-03	Cam, Switch
23		SFUM015-11	Spacer, LED
24		SFKK172-01	Cover, Lamp
25		SFXB122-02	Boss, Drive
26		SFQA172-01	Spring, Drive Boss
27		SFXJ172-01	Pin, Lock Canceler
28		SFUP122-02E	Bracket, Stylus-illuminator
29		SFUP122-03	Plate, Lock OPeration
30		SFDJ122-03E	Connector, 3-PIN
31		SFXO172-01	Pin, Guide
32		SFQA520-01	Spring, Lock Canceler Pin
33		SFQA001-02	Spring, Lock Operating Plate M'tg
34		SFXJ172-05	Pin, Lock Operating Plate M'tg
35 except [XAL]		SFSR4N4	Clamper, AC Cord
35 [XAL] only		SFHK040L	Clamper, AC Cord
36 except [XAL]		SFUP025X01	Bracket, AC Cord
36 [XAL] only		SFUP025-01	Bracket, AC Cord
37 except [XAL]	⚠	RJA23ZC	AC Cord
37 [XAL] only	⚠	QFC1208M	AC, Cord
38		SFUP132-03	Bracket, Power Transformer
39		SFGC122-01	Cushion, Power Transformer
40		SFUP122-10	Spacer, Power Transformer
41		SFKT122-02	Knob, Pitch Control Volume
42		SFKK122-03	Ornament, Pitch Control Volume
43		SFUZ122-01	Shading Cloth, Pitch Control Volume
44		SFUP122-09	Holder, LED
45		SFUP122-01	Bracket, Pitch Control Volume
46		SFDJ122-01E	Connector, 4-PIN
47		SFUP122-13	Supporter, Bottom Base
48		SFAU122-01	Base, Bottom
49		SFUP122-05	Supporter (A), Hinge
50		SFUP122-04	Supporter (B), Hinge
51		SFUM170-07	Case, Hinge
52		SFGC122-02E	Audio Insulator
53		SFUP122-06	Supporter (C), Hinge
54		SFKT015-02E	Knob, Speed Selector (45 r.p.m)
55 [XG, XA, XGB]		SFNN122N01	Name Plate
55 [XAL]		SFNN122L01	Name Plate
55 [E]		SFNN122S01	Instruction Book
56		SFXO122-01	Pipe (A)
57		SFXO122-02	Pipe (B)
58		SFAT122-01A	Hinge Ass'y
TONE ARM and ARM BASE			
61		SFPCC31001K	Head Shell
62		SFPAM18201K	Tone Arm Ass'y
63		SFPWG17201K	Balance Weight Ass'y
64		SFPRT18201K	Lift Ass'y
65		SFPZB17202	Knob, Arm Base Lock
66		SFQA829-03	Spring, Lift Ass'y
67		SFPAB13202	Knob, Arm Lift
68		SFPJL18202K	Oil Damper
70		SFPZB12203	Plate, Arm Base Cover
71		SFUM170-06	Spacer, Phono Cord
72		SFPZB12204	Clamper, Phono Cord
73		SFPAB18201K	Tone Arm Fixing Plate Ass'y

Ref. No.		Part No.	Part Name & Description
74		SFPZB12201K	Plate, Position Fix
75		SFDH028-01	Phono Cord
76		SFEL028-01E	Ground Wire
77		SFPRT17201K	Arm Rest
78		SFPKD17203	Arm Base
79		SFPKB17201S	Ring, Arm Base Operation
80		SFPKD12201	Bracket, Arm Base
81		SFPAB17206	Knob, Anti-skate Force Control
82		SFGK132-01	Cap, Rubber
SCREWS, WASHERS and CIRCLIPS			
●		**XTN3+8BFZ**	Screw
●		SFXGQ20-02	Screw
●		**XTN3+8B**	Screw
●		**XTN26+6B**	Screw
●		**XTN4+10B**	Screw
●		**XWA4B**	Washer
●		**XUC3FT**	Circlip
●		**XUC2FT**	Circlip
●		**XUC25FT**	Circlip
●		SFXW910J02	Washer
●		**XTN3+40BFZ**	Screw
●		**XSN3+10BVS**	Screw
●		XWE3F12FZ	Washer
●		**XTN3+25BFZ**	Screw
●		SFXW122-01	Washer
●		**XWE3E10**	Washer
●		SFPEW1100	Washer
●		SFPEW11003	Washer
●		**XSN3+8S**	Screw
●		SFXG132-01	Screw
●		**XTV3+8BFN**	Screw
●		**XTN3+10B**	Screw
●		**XTN2+10B**	Screw
●		XSN17+3FY	Screw
●		**XSN3+14S**	Screw
●		SFXW172-04	Washer
●		XUB14FT	Circlip
●		SFUZ172-05	O Ring
●		**XTN3+6B**	Screw
●		**XSN3+6S**	Screw
●		**XWA3BFZ**	Washer
●		**XWA3B**	Washer
●		**XWG3**	Washer
●		SFXG829-1	Screw
●		**XUC5FT**	Circlip
●		**XTW3+6B**	Screw
●		**XTV3+6BFN**	Screw
●		**XWE4A10EW**	Washer
●		**XTN3+25B**	Screw
●		XYN3+C6FZS	Screw
●		**XSN3+12BVS**	Screw
●		SFPEW17201	Washer
●		XWG26	Washer
ACCESSORIES			
A1 except [E]		SFNU122X01	Instruction Book
A1 [E] only		SFNU122S01	Instruction Book
A2		SFWE010	Adaptor, 45 r.p.m.
A3		SFPEN3302	Nut, Cartridge
A4		SFPEW9601	Washer, Cartridge
A5		SFCZV8801	Screw, Cartridge
A6		SFPEV9801	Screw, Cartridge
A7		SFKO135-01	Overhang Gauge
A8		SFPZB3501	Shell Weight
A9 [XA] only		SFDKI19118	Plug, 2-PIN
PACKINGS			
P1		SFHP122M01	Carton
P2		SFHH122-01	Pad, Front
P3		SFHH122-02	Pad, Rear
P4		SFHD122-01	Pad, Top
P5		SFHD122-02	Pad, (A), Turntable
P6		SFHD122-03	Pad, (B), Turntable
P7		SFYH60X60	Polyethylene Cover, Turntable Unit and Dust Cover
P8		SFYH40X45	Polyehtylene Cover, Turntable

■ EXPLODED VIEWS



ORDER NO. DAD8404007650

Service Manual

Supplement

Turntable System

SL-1200MK2

[M], [MC],
[E], [EK], [XL], [EG], [EB], [EH],
[EF], [Ei], [XA], [PA], [PE], [PC]

SL-1210MK2

[E], [EG], [EH]

Areas

* [M]	is available in the U.S.A.
* [MC]	is available in Canada.
* [E]	is available in Switzerland and Scandinavia.
* [EK]	is available in United Kingdom.
* [XL]	is available in Australia.
* [EG]	is available in F.R. Germany.
* [EB]	is available in Belgium.
* [EH]	is available in Holland.
* [EF]	is available in France.
* [Ei]	is available in Italy.
* [XA]	is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
* [PA]	is available in far East PX.
* [PE]	is available in European Military.
* [PC]	is available in European Audio Club.

*SL-1200MK2 is the model for silver type.
*SL-1210MK2 is the model for black type of SL-1200MK2.

Please use this manual together with the service manual for Model No. SL-1200MK2/1210MK2.

SPECIFICATIONS\ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ
DISASSEMBLY INSTRUCTIONS\ИНСТРУКЦИЯ ПО РАЗБОРКЕ
REPLACEMENT PARTS LIST\СПИСОК ЗАПАСНЫХ ЧАСТЕЙ
ADJUSTMENT POINTS\ТОЧКИ РЕГУЛИРОВКИ
MEASUREMENTS AND ADJUSTMENTS\ИЗМЕРЕНИЯ И РЕГУЛИРОВКИ
RESISTORS AND CAPACITORS\СОПРОТИВЛЕНИЯ И КОНДЕНСАТОРЫ
REPLACEMENT PARTS LIST\СПИСОК ЗАПАСНЫХ ЧАСТЕЙ
EXPLODED VIEW\СБОРОЧНЫЕ ЧЕРТЕЖИ
SCHEMATIC DIAGRAM\ПРИНЦИПИАЛЬНАЯ СХЕМА
BLOCK DIAGRAM\БЛОК - СХЕМА
PACKING \УПАКОВОЧНЫЕ МАТЕРИАЛЫ

Technics

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Matsushita Electric Industrial Co., Ltd.
1-2, 1-chome, Shibakoen, Minato-ku, Tokyo 105 Japan

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Specifications

Specifications are subject to change without notice for further improvement.
Weight and dimensions shown are approximate.

■ General

Power supply:	120V, AC 60 Hz (For [M], [MC] areas) ~110-120/220-240V, 50 or 60 Hz (For other areas)
Power consumption:	14 W (For [M], [MC] areas) 13.5 W (For other areas)
Dimensions:	45.3 x 16.2 x 36 cm
(W x H x D)	(17-27/32" x 6-19/64" x 14-11/64")
Weight:	12.5 kg (27.6 lb)

Turntable section

Type:	Quartz direct drive Manual turntable
Dirve method:	Direct drive
Motor:	Brushless DC motor
Turntable platter:	Aluminum diecast Diameter 33.2 cm (13-5/64") Weight 2 kg (4.4 lb)
Turntable speeds:	33-1/3 rpm and 45 rpm
Starting torque:	1.5 kg · cm (1.3 lb · in)
Build-up characteristics:	0.7 s. from standstill to 33-1/3 rpm
Braking system:	Electronic brake
Wow and flutter:	0.01% WRMS* 0.025% WRMS (JIS C5521) ± 0.035% peak (IEC 98A Weighted)

* This rating refers to turntable assembly alone, excluding effects of record, cartridge or tonearm, but including platter. Measured by obtaining signal from built-in frequency generator of motor assembly.

Rumble:	–56 dB (IEC 98A Unweighted) –78 dB (IEC 98A Weighted)

■ Tonearm section

Type:	Universal
Effective length:	230 mm (9-1/16")
Arm height adjustment range:	0 – 6 mm
Overhang:	15 mm (19/32")
Effective mass:	12 g (without cartridge)
Offset angle:	22°
Friction:	Less than 7 mg (lateral, vertical)
Tracking error angle:	Within 2°32' (at the outer groove of 30 cm (12") record Within 0°32' (at the inner groove of 30 cm (12") record
Stylus pressure adjustment range:	0 – 2.5 g
Applicable cartridge weight range:	6 – 10 g 13.5 – 17.5 g (including headshell)
(with auxiliary weight):	9.5 – 13 g 17 – 20.5 g (including headhsell)
(with shell weight):	3.5 – 6.5 g 11 – 14 g (including headshell)
Headshell weight:	7.5 g

CHANGES

■ DISASSEMBLY INSTRUCTIONS

- **How to remove the bottom cover and bottom base.**

1. Remove the turntable mat and turntable.
2. Turn over the body on a soft cloth thaking care not to damage the dust cover.
3. Remove the insulators and the 21 setscrews **(Fig. 1 : ❶,❷,❸)** of the bottom cover.
4. Remove the 6 setscrews **(Fig. 2 : ❹)** of the bottom base.

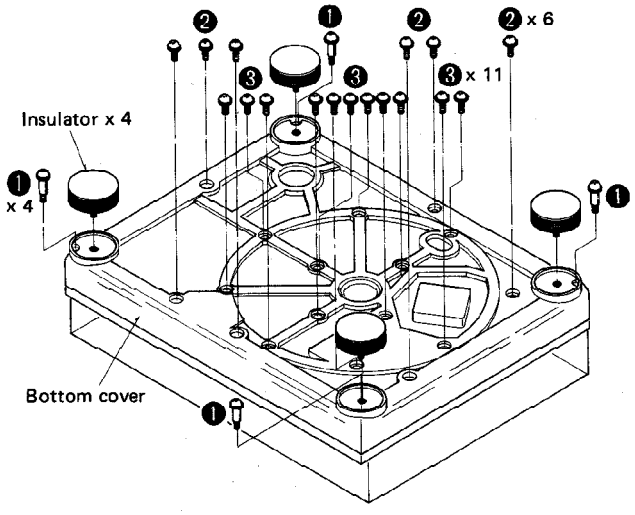


Fig. 1

- **How to remove the hinge case**

1. Remove the bottom cover. **(Refer to "How to remove the bottom cover".)**
2. Remove the 4 setscrews **(Fig. 2 : ❺)** of the hinge case bracket.
3. Remove the 4 setscrews **(Fig. 2 : ❻)** of the hinge case.

Note: The other disassembly procedure are the same as for before-change sets.

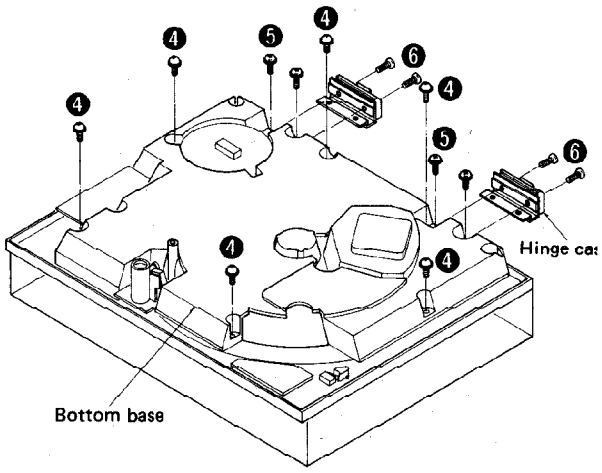


Fig. 2

■ REPLACEMENT PARTS LIST

Notes:

1. This parts list mentions only the difference between before and after change of SL-1200MK2/1210MK2.
2. Ⓚ-marked parts are used only for SL-1210MK2 (black type). And O-marked parts are used for SL1200MK2 (silver type).
3. Parts other than Ⓚ- and O-marked are used for both SL-1210MK2 and SL-1200MK2.
4. The "Ⓢ" mark is service standard parts and may differ from production parts.

Areas

* [M] is available in the U.S.A.
* [MC] is available in Canada.
* [E] is available in Switzerland and Scandinavia.
* [EK] is available in United Kingdom.
* [XL] is available in Australia.
* [EG] is available in F.R. Germany.
* [EB] is available in Belgium.
* [EH] is available in Holland.
* [EF] is available in France.
* [Ei] is available in Italy.
* [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
* [PA] is available in far East PX.
* [PE] is available in European Military.
* [PC] is available in European Audio Club.

Ref. No.	Change of Part No.		Part Name & Description	Per Set (Pcs.)	Remarks
	SL-1200MK2 (Before Change)	**SL-1200MK2/1210MK2 (After Change)**			
INTEGRATED CIRCUIT					
IC302	SVITC4011BP	MN4011B	NAND Gate	1	
TRANSISTOR					
Q1	2SD389A–Q	2SD1265	Regulator	1	
DIODES					
D1	SVDS1RBA40	SVDS1RBA20Z	Rectifier	1	⚠
D201, 202	SVDSR–105C	SVDPR3902S–9	Speed Indicator	2	
D203 ~ 206	SVDEBR5505S	SVDSLH54VT3	Strobe	4	
D401	SVDGL–9PG2	SVDGL–9NG2	Pitch Indicator	1	
CRYSTAL					
X201	SVQU306115	SVQMS4193	4.193 MHz, Oscillator	1	
VARIABLE RESISTORS					
VR301	EVMH2GA00B53	EVMH1GA00B23	Pitch Control Adjustment, 2kΩ (B)	1	
VR303	EVBJ05C19ABE	SFDZ122N11	Pitch Control	1	
SWITCHES					
S203	SFDSSS5GL13C	SFDSSS01GL13	Start/Stop	1	
S601	SFDSSS5GL13S	SFDSSS5GL13P	Power	1	⚠
TRANSFORMER					
T1	SLT60EU7B	SLT66DTL3A [M]	Power Source	1	⚠
T1	SLT60E31C	SLT66DT14C [MC]	Power Source	1	⚠
T1	SLTF5900	SLT66DTE13A [Other areas]	Power Source	1	⚠

Ref. No.	Change of Part No. SL-1200MK2 (Before Change) → SL-1200MK2/1210MK2 (After Change)		Part Name & Description	Per Set (Pcs.)	Remarks
RESISTORS					
R4	ERD25FJ561	ERD25FJ471	Carbon, 1/4W, 470Ω	1	Ⓢ
R209	ERD25TJ154	ERD25TJ334	Carbon, 1/4W, 330kΩ	1	Ⓢ
R211	ERD25FJ103	ERD25FJ472	Carbon, 1/4W, 4.7kΩ	1	Ⓢ
R212	ERD25FJ121	ERD25FJ151	Carbon, 1/4W, 150Ω	1	Ⓢ
R222	Addition	ERD25FJ391	Carbon, 1/4W, 390Ω	1	Ⓢ
R301	ERO25CKF3301	ERO25CKF2701	Metal Film, 1/4W, 2.7kΩ	1	Ⓢ
R304	ERD25FJ152	ERD25FJ561	Carbon, 1/4W, 560Ω	1	Ⓢ
R401	Addition	ERD50FJ152	Carbon, 1/2W, 1.5kΩ	1	Ⓢ
R601	ERD25FJ4R7	ERD50FJ4R7	Carbon, 1/2W, 4.7Ω	1	△ Ⓢ
CAPACITORS					
C5, 6	Addition	ECQM1223KZ	Polyester, 125V, 0.022μF	1	△
C104 ~ 107	ECQM1H104KZ	ECQM1H104JZ	Polyester, 50V, 0.1μF	4	Ⓢ
C109, 110	ECQM1H104KZ	ECQM1H104JZ	Polyester, 50V, 0.1μF	2	Ⓢ
C111	ECQM1H562KZ	ECQM1H562JZ	Polyester, 50V, 0.0056μF	1	Ⓢ
C204	ECQM1H473KZ	ECQM1H473JZ	Polyester, 50V, 0.047μF	1	Ⓢ
C210	ECQM1H224KZ	ECQM1H224JZ	Polyester, 50V, 0.22μF	1	Ⓢ
C211	ECQM1H473KZ	ECQM1H473JZ	Polyester, 50V, 0.047μF	1	Ⓢ
C217 ~ 219	Addition	ECKD1H104ZF	Ceramic, 50V, 0.1μF	1	Ⓢ
C301	ECQK1123FZ	ECQK1333GZ	Polyester, 125V, 0.033μF	1	
C302	ECQK1123FZ	ECQK1682GZ	Polyester, 125V, 0.0068μF	1	
C305	ECQM1H122KZ	ECQM1H122JZ	Polyester, 50V, 0.0012μF	1	Ⓢ
CABINET and CHASSIS PARTS					
9	SFUP122–12	Deletion	----------	0	
10	SFAC122–01	SFAC122–01	Cabinet (Silver)	1	○
		SFAC124S01	Cabinet (Black)	1	Ⓚ
25	SFXB122–02	SFXB122–06	Boss, Drive	1	
33	SFQA001–02	SFQA122–03	Spring	1	
36	SFUP025–01	SFUP122–16 [M, MC, PA, PE, PC]	Bracket, AC Cord	1	
	SFUP025X01	SFUP122X01 [Other areas]	Bracket, AC cord	1	
38	SFUP132–03	SFGC122–03	Cushion	2	
40	SFUP122–10	Deletion	----------	0	
42	SFKK122–03	SFKK122–03	Plate (Silver)	1	
		SFKK124S01	Plate (Black)	1	
48	SFAU122–01	SFAU122–02	Bottom Base	1	
48–1	Addition	SFAU122–03	Bottom Cover	1	
49	SFUP122–05	SFUP122–23	Supporter (A), Hinge	2	
50	SFUP122–04	SFUP122–24	Supporter (B), Hinge	2	
51	SFUM170–07	SFUMM02N04	Case, Hinge	2	
55	SFNN122M01	SFNN122M10 [M]	Name Plate	1	○
	SFNN122C01	SFNN122C10 [MC]	Name Plate	1	○
	SFNN122S01	SFNN122S10 [E]	Name Plate	1	○
	SFNN122L01	SFNN122G10 [EK, XL]	Name Plate	1	○
	SFNN122X01	SFNN122X10 [XA]	Name Plate	1	○
	Addition	SFNN122P10 [PA, PE]	Name Plate	1	○
	Addition	SFNN122P11 [PC]	Name Plate	1	○
	SFNN122N01	SFNN122N10 [Other areas]	Name Plate	1	○
	Addition	SFNN124S10 [E]	Name Plate	1	Ⓚ
	Addition	SFNN124Q10 [EG, EH]	Name Plate	1	Ⓚ
56	SFX0122–01	Deletion	----------	0	
57	SFX0122–02	Deletion	----------	0	
58	SFAT122–01A	SFATM02N01A	Hinge	1	

Ref. No.	Change of Part No.		Part Name & Description	Per Set (Pcs.)	Remarks
	SL-1200MK2 (Before Change)	SL-1200MK2/1210MK2 (After Change)			
TONEARM PARTS					
62	SFPAM18201K	SFPAM18201K	Tonearm Ass'y (Silver)	1	○
		SFPAM18202K	Tonearm Ass'y (Black)	1	Ⓚ
79	SFPKB17201S	SFPKB17204E	Ring, Arm Base Operation	1	
82	SFGK132–01	SFGK132–01	Cap (Silver)	1	○
		SFGK133S01	Cap (Black)	1	Ⓚ
ACCESSORIES					
A1	SFNU122M01	SFNU122M06 [M]	Instruction Book	1	
	SFNU122C01	SFNU122C06	Instruction Book	1	
	SFNU122S01	SFNU122S01 [E]	Instruction Book	1	
	SFNU122G01	SFNU122G01 [EK]	Instruction Book	1	
	Addition	SFNU122P01 [PA, PE, PC]	Instruction Book	1	
	SFNU122X01	SFNU122X01 [Other areas]	Instruction Book	1	
A2	SFWE010	SFWE122–01	45 Adaptor	1	
PACKING PARTS					
P1	SFHP122C01	SFHP122C02 [MC, EF]	Carton Box (Silver)	1	○
	SFHP122M01	SFHP122M02 [Other areas]	Carton Box (Silver)	1	○
		SFHP124S02	Carbon Box (Black)	1	Ⓚ
P9	Addition	SPB1083	Polyethylene Bag, Accessories	2	
P10	Addition	SPJ15	Polyethylene Bag, Shell Weight	1	
P11	Addition	SFHZD03M01	Polyethylene Bag, Dust Cover	3	
P12	Addition	SFHZ122–01	Polyethylene Bag, 45 Adaptor	1	
P13	Addition	SPP189	Polyethylene Bag, Cords	2	

■ ADJUSTMENT POINTS

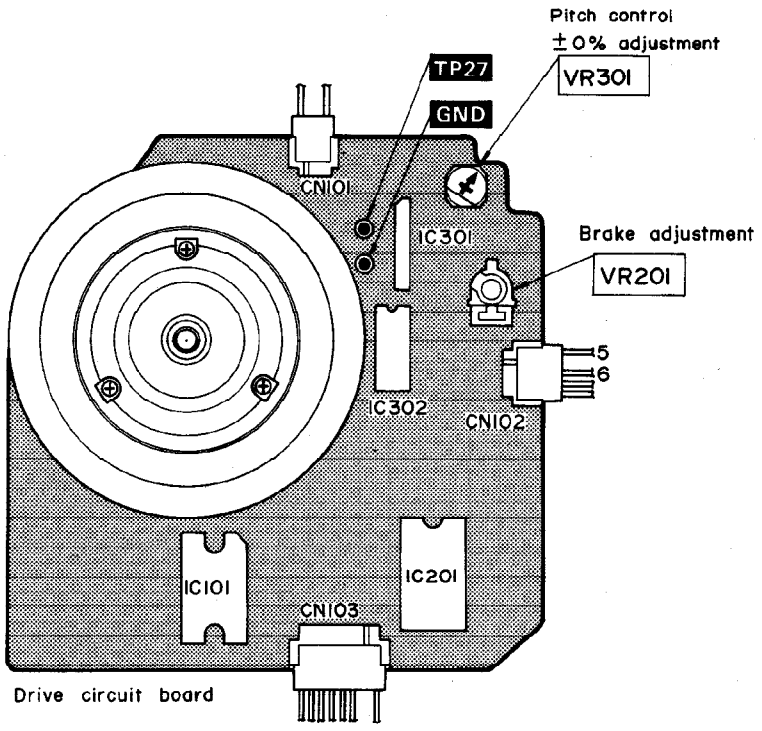


Fig. 3 (Abb. 3)

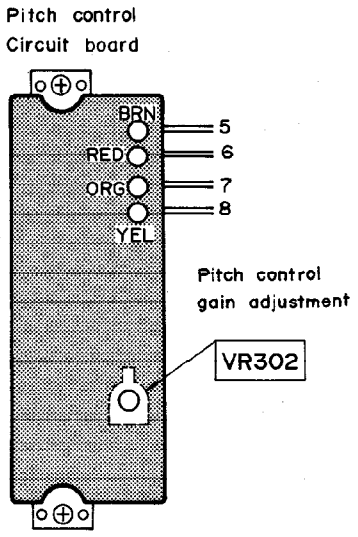


Fig. 4 (Abb. 4)

■ MEASUREMENTS AND ADJUSTMENTS English

- **Conditions of set, and instruments used**

1. Remove the panel cover.
2. Remove the bottom cover (when adjusting the pitch control gain).
3. Frequency counter
4. Tester

	Adjustment	Connection	Parts adjusted	Procedure
1	**Pitch control ± 0% adjustment**	Frequency counter (+) – TP27 (–) – Earth point	VR301 **(Fig. 3)**	1. Connect the frequency counter and turn the power supply ON. 2. Set the pitch control knob to "0". (Indicator lights up.) 3. Adjust VR301 so that the frequency is 262.08 kHz ± 0.05 kHz.
2	**Pitch control gain adjustment**	Tester (+) – CN102 terminal ⑤ (–) – CN102 terminal ⑥	VR302 **(Fig. 4)**	1. Set the pitch control knob to "0". 2. Pull out the connector CN102 of drive P.C.B. 3. Connect the tester to terminals, ⑤ and ⑥ of connector CN102 on the pitch control P.C.B. side. 4. Adjust VR302 so that the resistance value of the tester is 2.7 kΩ ± 0.1 kΩ.
3	**Brake adjustment**	———	VR201 **(Fig. 3)**	1. Adjust VR201 so that the rotation at 33 r.p.m. stops within the angle of 90° ~120° after depressing the stop button.

■ RESISTORS AND CAPACITORS

Notes:
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
2. Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
3. The "Ⓢ" mark is service standard parts and may differ from production parts.
4. Bracketed indications in Ref. No. colum specify the area. Parts without these indications can be used for all area.
5. The unit of resistance is Ω (ohm). K = 1000Ω, M = 1000kΩ
6. The unit capacitance is μF (microfarad). P = 10^{-6} μF

Areas

* [M] is available in the U.S.A.
* [MC] is available in Canada.
* [E] is available in Switzerland and Scandinavia.
* [EK] is available in United Kingdom.
* [XL] is available in Australia.
* [EG] is available in F.R. Germany.
* [EB] is available in Belgium.
* [EH] is available in Holland.
* [EF] is available in France.
* [Ei] is available in Italy.
* [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
* [PA] is available in far East PX.
* [PE] is available in European Military.
* [PC] is available in European Audio Club.

Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolearance	Value
ERX	2	AN	J	2R2
Type	Wattage	Shape	Tolerance	Value

Resistor type	Wattage	Tolerance
ERD: Carbon	25 : 1/4W	F : ±1%
ERG: Metal Oxide	50 : 1/2W	J : ±5%
ERO: Metal Film	1A : 1W	
ERX: Metal Film	2A : 2W	

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity
ECEA	50	M	R47	R
Type	Voltage	Reculiarity use	Value	Special use

Capacitor Type		Voltage		Tolearnce	
ECEA	: Electrolytic	OJ	: 6.3V	J	: ±5%
ECEB	: Electrolytic	1C	: 16V	K	: ±5%
ECCD	: Ceramic	1E	: 25V	M	: ±20%
ECQM	: Polyester	1H	: 50V	Z	: +80%,−20%
ECQU	: Polyester	1	: 100V		
ECQF	: Polyester	1A	: 125V		
ECNC	: Polyester	4A	: 400V		

Ref. No.		Part No.	Value
RESISTORS			
R1	Ⓢ	ERD25FJ562	5.6K
R2	Ⓢ	ERD25FJ682	6.8K
R3	Ⓢ	ERD25FJ272	2.7K
R4,5	Ⓢ	ERD25FJ471	470
R101	Ⓢ	ERD25FJ103	10K
R102	Ⓢ	ERX1ANJ4R7	4.7
R103	Ⓢ	ERD25FJ472	4.7K
R104	Ⓢ	ERD25TJ473	47K
R105	Ⓢ	ERD25FJ103	10K
R106	Ⓢ	ERD25FJ150	15
R107	Ⓢ	ERX1ANJ1R5	1.5
R108	Ⓢ	ERD25FJ103	10K
R109,110	Ⓢ	ERX1ANJ4R7	4.7
R201	Ⓢ	ERG1ANJ561	560
R202	Ⓢ	ERD25FJ103	10K
R203	Ⓢ	ERD25FJ470	47
R204	Ⓢ	ERD25FJ272	2.7K
R205	Ⓢ	ERD25TJ124	120K
R206	Ⓢ	ERD25TJ183	18K
R207	Ⓢ	ERD25TJ563	56K
R208	Ⓢ	ERD25TJ224	220K
R209	Ⓢ	ERD25TJ334	330K
R210	Ⓢ	ERD25TJ183	18K
R211	Ⓢ	ERD25FJ472	4.7K
R212	Ⓢ	ERD25FJ151	150
R213	Ⓢ	ERD25FJ122	1.2K
R214	Ⓢ	ERD25TJ223	22K
R215	Ⓢ	ERD25FJ472	4.7K
R216	Ⓢ	ERD25TJ154	150K
R217	Ⓢ	ERD25TJ223	22K
R218	Ⓢ	ERD25FJ102	1K
R219	Ⓢ	ERD25FJ332	3.3K
R220	Ⓢ	ERD25FJ221	220
R221	Ⓢ	ERD25FJ471	470
R222	Ⓢ	ERD25FJ391	390
R301	Ⓢ	ERD25CKF2701	2.7K
R302	Ⓢ	ERD25FJ471	470
R303	Ⓢ	ERD25FJ822	8.2K
R304	Ⓢ	ERD25FJ561	560
R305	Ⓢ	ERD25FJ181	180
R306	Ⓢ	ERD25TJ223	22K
R307	Ⓢ	ERD25FJ272	2.7K
R401	⚠ Ⓢ	ERD50FJ152	1.5K
R601	⚠ Ⓢ	ERD50FJ4R7	4.7

Ref. No.		Part No.	Value
CAPACITORS			
C1		ECEB1HU471	470
C2		ECEA1EU330	33
C3		ECEA1EU220	22
C5,6		ECQM1223KZ	0.022
C101,102		ECEA1EU330	33
C103		ECEA1EU330	33
C104,105	Ⓢ	ECQM1H104JZ	0.1
C106,107	Ⓢ	ECQM1H104JZ	0.1
C108		ECEA1EU101	100
C109,110	Ⓢ	ECQM1H104JZ	0.1
C111	Ⓢ	ECQM1H562JZ	0.0056
C112		ECEA1HU4R7	4.7
C201		ECEA1CU330	33
C202,203		ECEA1HU010	1
C204	Ⓢ	ECQM1H473JZ	0.047
C205		ECEA0JU221	220
C206		ECEA1HU010	1
C207	Ⓢ	ECCD1H101K	100P
C208	Ⓢ	ECCD1H220K	22P
C209		ECEA1CU101	100
C210	Ⓢ	ECQM1H224JZ	0.22
C211	Ⓢ	ECQM1H473JZ	0.047
C212		ECEA1HU3R3	3.3
C213	Ⓢ	ECCD1H471K	470P
C214		ECEA1CU101	100
C215		ECEA1HU010	1
C216		ECEA1CU470	47
C217,218		ECKD1H104ZF	0.1
C219		ECKD1H104ZF	0.1
C301		ECQK1333GZ	0.033
C302		ECQK1682GZ	0.0068
C303		ECEA1HU010	1
C304		ECEA1CU100	10
C305	Ⓢ	ECQM1H122JZ	0.0012
C306		ECEA1HU010	1
C601 [M]	⚠	ECQF1A473MD	0.047
C601 [MC]	⚠	ECQU1A47ME	0.047
C601 [Other ares]	⚠	ECNC4A473M	0.047

■ REPLACEMENT PARTS LIST

Notes:
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
2. Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
3. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
4. The "Ⓢ" mark is service standard parts and may differ from production parts.
5. The parenthesized numbers in the column of description stand for the quantity per set.
6. Ⓚ-marked parts are used only for SL-1210MK2 (black type). And ○-marked parts are used for SL-1200MK2 (silver type).
7. Parts other than Ⓚ-and ○-marked are used for both SL-1210MK2 and SL-1200MK2.

Areas

* [M] is available in the U.S.A.
* [MC] is available in Canada.
* [E] is available in Switzerland and Scandinavia.
* [EK] is available in United Kingdom.
* [XL] is available in Australia.
* [EG] is available in F.R. Germany.
* [EB] is available in Belgium.
* [EH] is available in Holland.
* [EF] is available in France.
* [Ei] is available in Italy.
* [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
* [PA] is available in far East PX.
* [PE] is available in European Military.
* [PC] is available in European Audio Club.

Ref. No.	Part No.	Description
INTEGRATED CIRCUITS		
IC101	AN6675	Turntable Drive
IC201	AN6680	Turntable Control
IC301	AN6682	Pitch Control
IC302	MN4011B	NAND Gate
TRANSISTORS		
Q1	2SD1265	Regulator
Q2,3	2SD637	Regulator
Q201 Ⓢ	2SC1846-R	Regulator
Q202	2SD637	LED Driver
Q203 Ⓢ	2SC1328-T	FG Amp.
DIODES		
D1 ⚠	SVDS1RBA20Z	Rectifier
D2	MA1051	5.1V Zener
D201,202	SVDPR3902S-9	Speed Indicator
D203~206	SVDSLH54VT3	Strobe
D204A	MA162A	Switching
D301	MA1051	5.1V Zener
D401	SVDGL-9NG2	Pitch Indicator

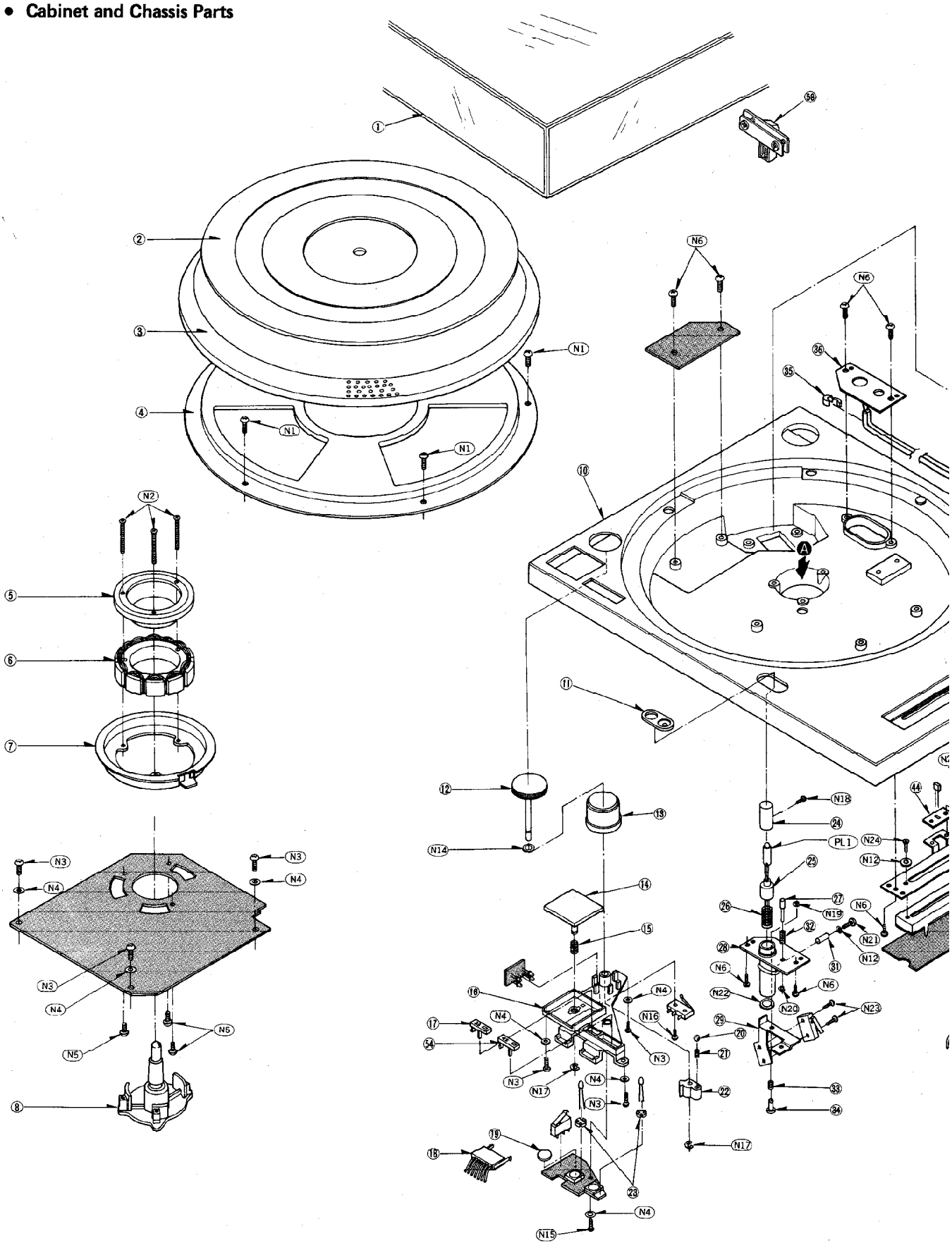
Ref. No.	Part No.	Description
CRYSTAL		
X201	SVQMS4193	4.193MHz Oscillator
VARIABLE RESISTORS		
VR201 Ⓢ	EVTS3MA00B54	Brake Adjustment,50kΩ(B)
VR301	EVMH1GA00B23	Pitch Control±0% Adjustment,2kΩ(B)
VR302 Ⓢ	EVTS3MA00B54	Pitch Control Gain Adjustment,50kΩ(B)
VR303	SFDZ122N11	Pitch Control
SWITCHES		
S201,202	EVQP5R04K	Speed Selector
S203	SFDSSS01GL13	Stort/Stop
S401	SFDSD2MSL-C	Stylus-Illuminator
S601 ⚠	SFDSSS5GL13P	Power
S602 Except for [M,MC] ⚠	SFDSHXW01317	Voltage Selector

Ref. No.	Part No.	Description
LAMP		
PL1 ⚠	SFDN122-01	Stylus Illuminator
TRANSFORMER		
T1 [M] ⚠	SLT66DTL3A	Power Source
T1 [MC] ⚠	SLT66DT14C	Power Source
T1 [Other areas] ⚠	SLT66DTE13E	Power Source
FUSES		
F1 [MC] ⚠	XBA1F12NU14	125V,1.2A
F1 Except for [M,MC] ⚠	XBA2C025T1A	250V,T250mA
F2 Except for [M,MC] ⚠	XBA2C10TR0	250V,T1A

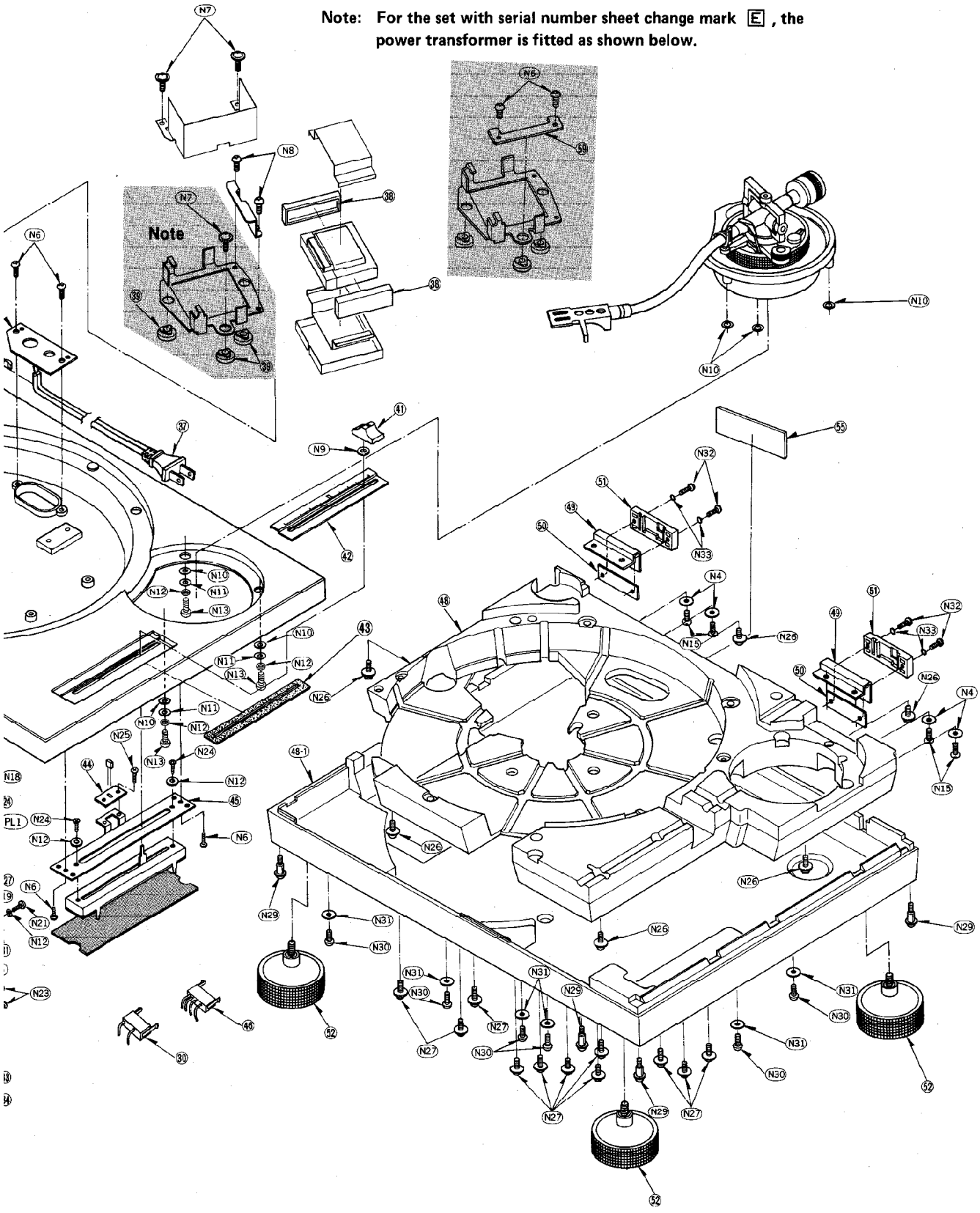
Ref. No.	Part No.	Description
CHABINET AND CHASSIS PARTS		
1	SFAD122-01A	Dust Cover (1)
2	SFTG172-01	Turntable Mat (1)
3	SFTE172-01	Turntable Platter Ass'y (1)
4	SFUM172-05	Cover, Cabinet (1)
5	SFMGQ20-01	Cover, Drive Coil (1)
6	SFMG520-31A	Drive Coil Ass'y (1)
7	SFMZ172-01E	FG Coil Ass'y (1)
8	SFMZQ20-01A	Shaft Ass'y, Turntable (1)
10 ○	SFAC122-01	Cabinet (Silver)
10 Ⓚ	SFAC124S01	Cabinet (Black) (1)
11	SFUM172-04	Ornament, Stylus Illuminator (1)
12	SFKT122-01	Knob, Power Switch (1)
13	SFKK122-01E	Case, Strobe Illuminator (1)
14	SFKT015-06	Button, Start/Stop (1)
15	SFQA122-01	Spring, Start/Stop Button (1)
16	SFUM122-01	Base, Operation (1)
17	SFKT015-01E	Button, Speed (33) (1)
18	SFDJ122-02E	Connector, 7pin (1)
19	SFGZ122-01	Spacer, Rubber (1)
20	SFYB-5-32	Ball, Switch Cam (1)
21	SFQA520-01	Spring, Switch Cam (1)
22	SFUM122-03	Cam, Power Switch (1)
23	SFUM015-11	Spacer, Speed Indicator (2)
24	SFKK172-01	Cover,Stylus Illuminator (1)
25	SFXB122-06	Boss, Drive (1)
26	SFQA172-01	Spring, Drive Boss (1)
27	SFXJ172-01	Pin, Lock Canceler (1)
28	SFUP122-02E	Bracket, Stylus Illuminator (1)
29	SFUP122-03	Plate, Lock Operation (1)
30	SFDJ122-03E	Connector, 3pin (1)
31	SFX0172-01	Pin, Guide (1)
32	SFQA520-01	Spring, Lock Canceler (1)
33	SFQA122-02	Spring, Lock Operation Plate (1)
34	SFXJ172-05	Pin, Lock Operation Plate (1)
35 (M,MC,PA PE,PC)	SFHK040L	Clamper, AC Cord (1)
35 (EK)	SFSR-5N-4	Clamper, AC Cord (1)
35 (Other areas)	SFSR-4N-4	Clamper, AC Cord (1)
36 (M,MC,PA PE,PC)	SFUP122-16	Bracket, AC Cord (1)
36 (Other areas)	SFUP122X01	Bracket, AC Cord (1)
37 ⚠Ⓢ (M,MC)	RJA9Y	AC Cord (1)
37 (EK) ⚠Ⓢ	QFC1205M	AC Cord (1)
37 (XL) ⚠Ⓢ	SJAG23	AC Cord (1)
37 ⚠Ⓢ (PA,PE,PC)	SJA83	AC Cord (1)
37 ⚠Ⓢ (Other areas)	SJA88	AC Cord (1)
38	SFGC122-03	Rubber, Power Transformer (2)
39	SFGC122-01	Cushion, Power Transformer (3)
41	SFKT122-02	Knob, Pitch Control (1)
42 ○	SFKK122-03	Ornament (Silver), Pitch Control (1)
42 Ⓚ	SFKK124S01	Ornament (Black), Pitch Control (1)
43	SFUZ122-01	Felt (1)
44	SFUP122-09	Holder, LED (1)
45	SFUP122-01	Bracket, Pitch Control (1)
46	SFDJ122-01E	Connector, 4pin (1)
48	SFAU122-03	Bottom Base (1)
48-1	SFAU122-02	Bottom Cover (1)
49	SFUP122-23	Supporter (A),Hinge (2)
50	SFUP122-24	Supporter (B), Hinge (2)
51	SFUMM02N04	Case, Hinge (2)
52	SFGC122-02E	Insulator (4)
54	SFKT015-02E	Button, Speed (45) (1)
55 (M) ○	SFNN122M10	Name Plate (1)
55 (MC) ○	SFNN122C10	Name Plate (1)
55 (E) ○	SFNN122S10	Name Plate (1)
55 (EK,XL) ○	SFNN122G10	Name Plate (1)
55 (XA) ○	SFNN122X10	Name Plate (1)
55 (PA,PE) ○	SFNN122P10	Name Plate (1)
55 (PC) ○	SFNN122P11	Name Plate (1)
55 (Other areas) ○	SFNN122N10	Name Plate (1)
55 (E) Ⓚ	SFNN124S10	Name Plate (1)
55 (EG,EH) Ⓚ	SFNN124Q10	Name Plate (1)
58	SFATM02N01A	Hinge (2)
59	SFUP122-25	Plate,Power transformer (1)
TONEARM PARTS		
61	SFPCC31001K	Headshell (1)
62 ○	SFPAM18201K	Tonearm Ass'y (Silver) (1)
62 Ⓚ	SEPAM18202K	Tonearm Ass'y (Black) (1)
63	SFPWG17201K	Balance Weight (1)
64	SFPRT18201K	Lift Ass'y (1)
65	SFPZB17202	Knob, Arm Base Lock (1)
66	SFQA829-03	Spring, Lift Ass'y (1)
67	SFPAB13202	Knob, Arm Lift (1)
68	SFPJL18202K	Oil Damper (1)
70	SFPZB12203	Plate, Arm Base Cover (1)
71	SFUM170-06	Spacer, Phono Cord (1)
72	SFPZB12204	Clamper, Phono Cord (1)
73	SFPAB18201K	Tonearm Fixing Plate (1)
74	SFPZB12201K	Plate (1)
75	SFDH122-05	Phono Cord (1)
76	SFEL028-01E	Ground Wire (1)
77	SFPRT17201K	Arm Rest (1)
78 ○	SFPKD17203	Arm Base (Silver) (1)
78 Ⓚ	SFPKD17205	Arm Base (Black) (1)
79	SFPKB17204E	Ring,Arm Base Operation (1)
80	SFPKD12201	Bracket, Arm Base (1)
81	SFPAB17206	Knob, Anti-Skating (1)
82 ○	SFGK132-01	Cap (Silver) (1)
82 Ⓚ	SFGK133S01	Cap (Black) (1)
SCREW,NUT AND WASHERS		
N1 Ⓢ	XTN3+8BFZ	Screw (5)
N2	SFXGQ20-02	Screw (3)
N3 Ⓢ	XTN3+8B	Screw (8)
N4 Ⓢ	XWG3	Washer (12)
N5 Ⓢ	XTN26+6B	Screw (3)
N6 Ⓢ	XTV3+8BFN	Screw (8)
N7	SFXG172-01	Screw (3)
N8	XTN3+5J	Screw (2)
N9	SFXW172-03	Washer (1)
N10	SFPEW11003	Washer (6)
N11 Ⓢ	XWE3E10	Washer (3)
N12 Ⓢ	XWA3B	Washer (8)
N13 Ⓢ	XSN3+10S	Screw (3)
N14	SFXW910J02	Washer (1)
N15 Ⓢ	XTN3+10B	Screw (5)
N16 Ⓢ	XTN2+10B	Screw (1)
N17 Ⓢ	XUC3FT	Circlip (2)
N18	XSN17+3FY	Screw (1)
N19 Ⓢ	XUC2FT	Circlip (1)
N20 Ⓢ	XUC25FT	Circlip (1)
N21 Ⓢ	XSN3+14S	Screw (1)
N22	RTW-12	Circlip (1)
N23 Ⓢ	XSN2+10	Screw (2)
N24 Ⓢ	XSN3+6S	Screw (2)
N25 Ⓢ	XTN3+6B	Screw (5)
N26	XTWS3+14TFZ	Screw (6)
N27	SFXG122-02	Screw (11)
N29	SFXG122-01	Screw (4)
N30	XTN3+14QFZ	Screw (6)
N31 Ⓢ	XWG3FZ	Washer (6)
N32 Ⓢ	XSN3+14BVS	Screw (4)
N33 Ⓢ	XWA3BFZ	Washer (4)
N34	SFXG829-1	Screw (1)
N35 Ⓢ	XSN3+8S	Screw (2)
N36 Ⓢ	XUC5FT	Circlip (1)
N37	SFPEV17202	Screw (3)
N38 Ⓢ	XTN3+25B	Screw (1)
N39	SFPEW1100	Washer (1)
N40 Ⓢ	XSN3+6BVS	Screw (4)
N41 Ⓢ	XWC3BFZ	Washer (1)
N42 Ⓢ	XSN3+12BVS	Screw (2)
N43 Ⓢ	XWG3FZ	Washer (2)
N44	SFXW701-02	Washer (1)
N45	SFPEW00705	Washer (4)
N46	XTW26+5E	Screw (1)
ACCESSORIES		
A1 (M)	SFNU122M06	Instruction Book (1)
A1 (MC)	SFNU122C06	Instruction Book (1)
A1 (E,EB,EC)	SFNU122S01	Instruction Book (1)
A1 (EK)	SFNU122G01	Instruction Book (1)
A1 (PA, PE,PC)	SFNU122P01	Instruction Book (1)
A1 (Other areas)	SFNU122X01	Instruction Book (1)
A2	SFWE010	45 Adaptor (1)
A3	SFPEN3302	Nut,Cartridge (2)
A4	SFPEW9601	Washer,Cartridge (2)
A5	SFCZV8801	Screw,Cartridge (2)
A6	SFPEV9801	Screw,Cartridge (2)
A7	SFK0135-01	Overhang Gauge (1)
A8	SFPZB3601	Shell Weight (1)
A9 ⚠ (XA) Only	SFDKI19118	2pin Plug (1)
A10	SFPWG17202	Sub-weight (1)
A11 ⚠ (PA,PE, PC) Only	QJP0603S	Adaptor, Gimens
PACKING PARTS		
P1 (MC, EF) ○	SFHP122C02	Carton Box (Silver) (1)
P1 (Other areas) ○	SFHP122M02	Carton Box (Silver) (1)
P1 Ⓚ	SFHP124S02	Carton Box (Black) (1)
P2	SFHH122-01	Pad, Front (1)
P3	SFHH122-02	Pad, Rear (1)
P4	SFHD122N05	Pad, Top (1)
P5	SFHD122-02	Pad (A), Turntable (1)
P6	SFHD122N06	Pad (B), Turntable (1)
P7	SFYH60X60	Polyethylene Bag, Unit& Dust Cover (2)
P8	SFYH40X45	Polyethylene Bag, Turntable (1)
P9	SPB1083	Polyethylene Bag, Accessories (3)
P10	SPJ15	Polyethylene Bag, Shell Weight (1)
P11	SFHZD03M01	Cover Sheet, Dust Cover (1)
P12	SFHZ122-01	Cover Sheet, 45Adaptor (1)
P13	SPP189	Cover Sheet, Cords (2)

■ EXPLODED VIEWS

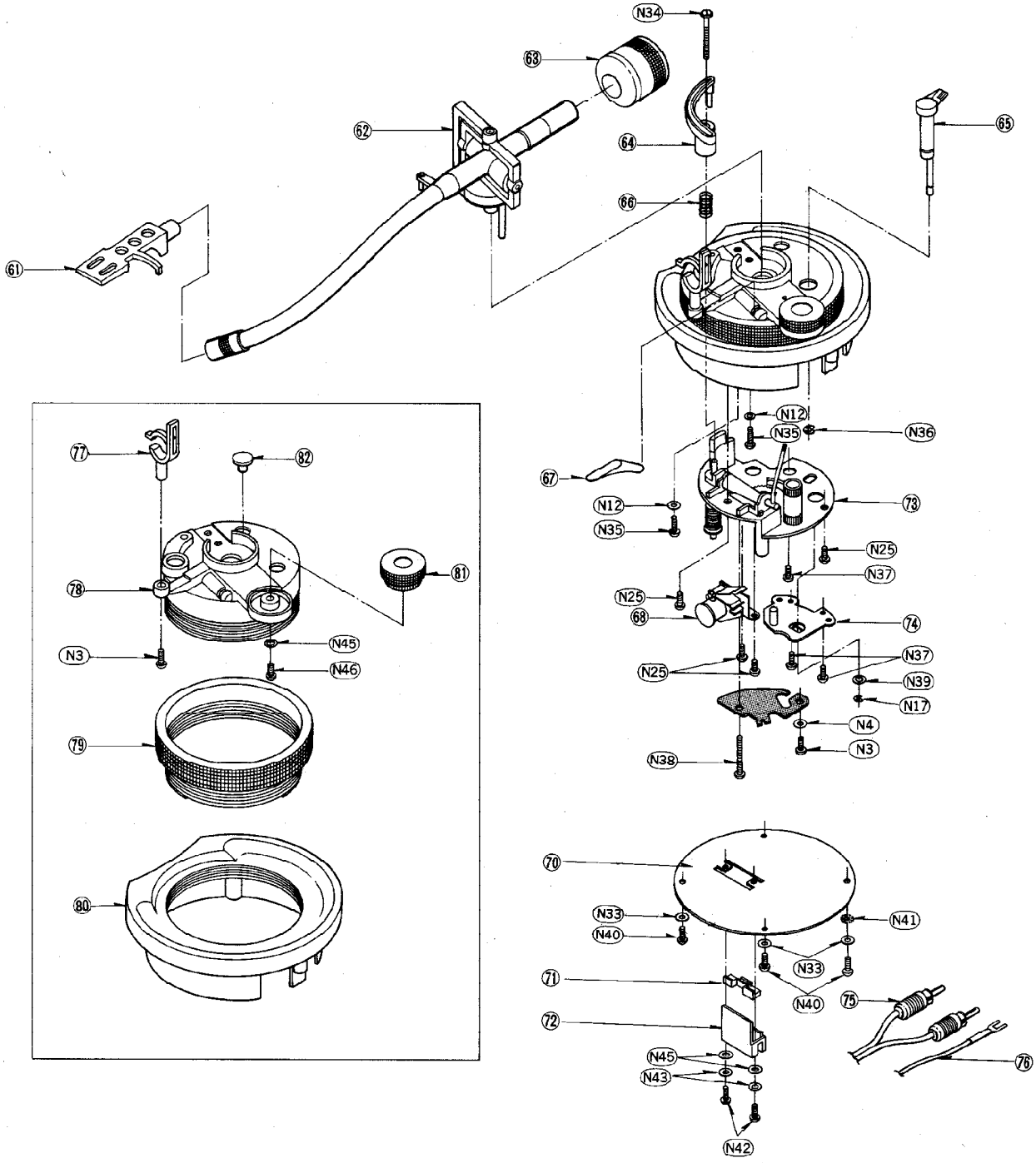
- **Cabinet and Chassis Parts**



Note: For the set with serial number sheet change mark [E], the power transformer is fitted as shown below.



- **Tonearm Parts**



■ SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

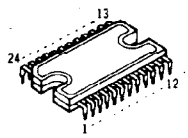
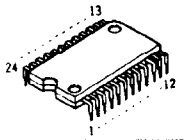
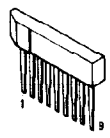
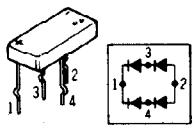
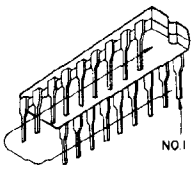
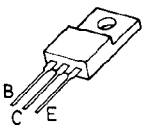
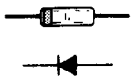
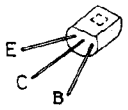
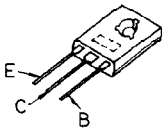
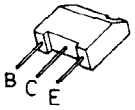
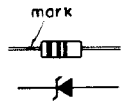
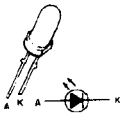
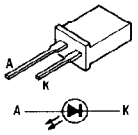
Notes:

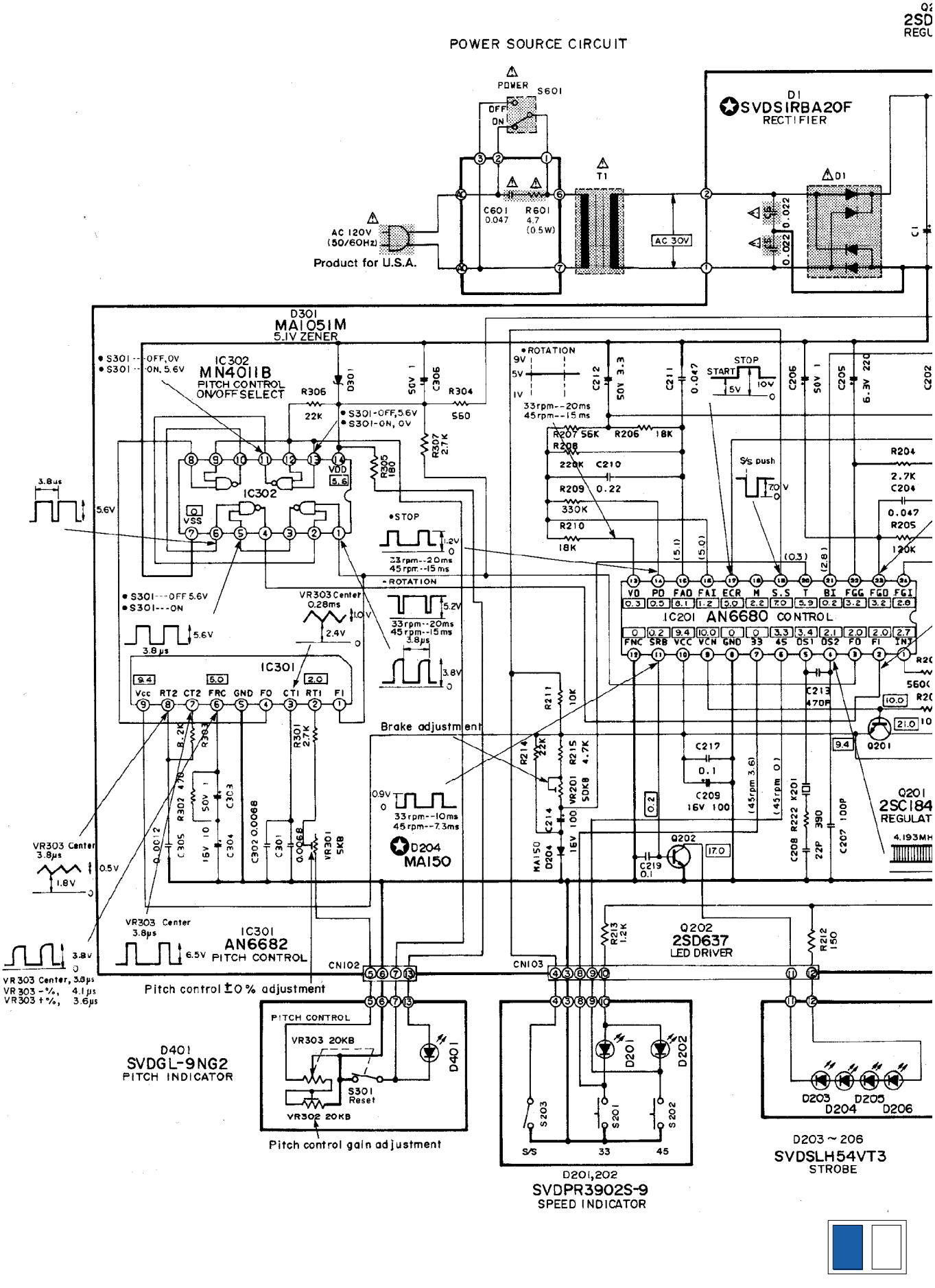
1. **S201, 202** : Speed selector switch.
2. **S203** : Start/stop switch.
3. **S301** : Pitch control reset switch in "**off**" position.
4. **S401** : Stylus illuminator switch in "**off**" position.
5. **S601** : Power switch in "**on**" position.
6. **S602** : Voltage selector in "**220 – 240**" position.
7. The voltage value, and waveforms are the reference voltage values of this unit measured by DC electronic voltmeter (high-impedance) and oscilloscope on the basis of chassis. Therefore, the voltage value and waveform may include some error due to the internal impedance of the tester or the measuring set.
   * [ ] is the voltage when turntable is in stop.
   *( ) is the voltage when turntable is in rotation. (at 33 rpm)
8. ——— +B voltage lines.
9. Important safety notice.
   Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
10. The part No. of diodes mentioned in the schematic diagram stand for production part No. Regarding the part No. with ✪ mark the production part No. are different from the replacement part No. Therefore, when placing an order for replacement part, please use the part No. in the replacement parts list.

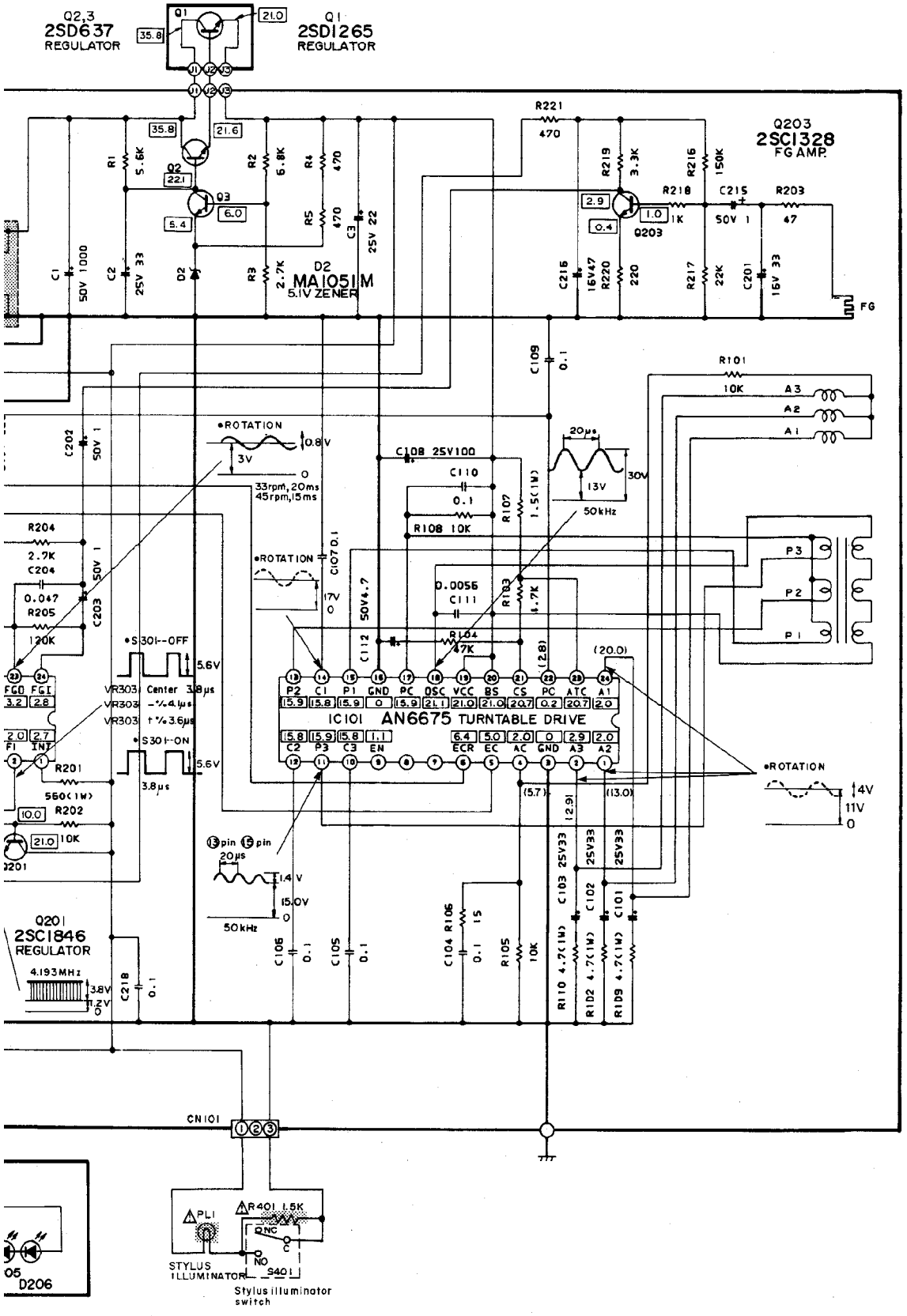
IMPORTANT SAFETY NOTICE

The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards.
When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.

• Terminal guide of transistors, diodes and IC's

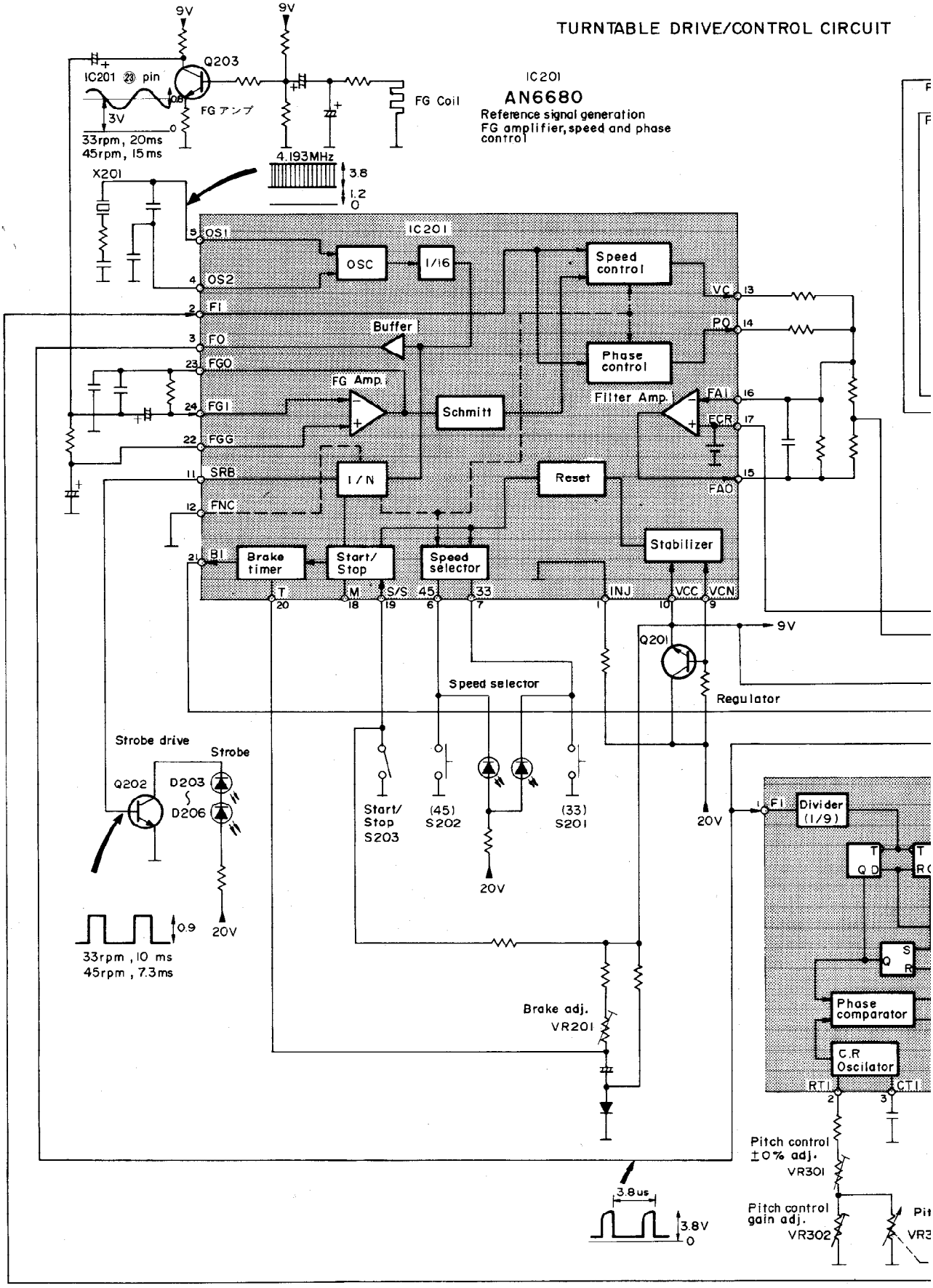
AN6675	AN6680	AN6682	SVDS1RBA20F
			
MN4011B 14 Pin		2SD1265	MA150
			
2SC1328	2SC1846	2SD637 2SB641 2SD636 2SB643	MA1051
			
SVDPR3902S-9 SVDSLH54VT3	SVDGL-9PG2		
			


POWER SOURCE CIRCUIT
POWER
S601
OFF
ON
D1
SVDSIRBA20F
RECTIFIER
T1
C601 0.047
R601 4.7 (0.5W)
AC 120V (50/60Hz)
Product for U.S.A.
AC 30V
C1B 0.022
C1A 0.022
C1
D301
MA1051M
5.1V ZENER
IC302
MN4011B
PITCH CONTROL ON/OFF SELECT
• S301---OFF, 0V
• S301---ON, 5.6V
R306 22K
R304 560
R307 2.7K
R305 180
VDD 5.6
VSS
IC302
• S301-OFF, 5.6V
• S301-ON, 0V
• ROTATION
33rpm--20ms
45rpm--15ms
• STOP
• S301---OFF 5.6V
• S301---ON
VR303 Center 0.28ms
3.8µs
5.6V
IC301
Vcc RT2 CT2 FRC GND FO CTI RTI FI
R302 4.7K
R303 8.2K
R301 2.7K
C305 0.0012
C304 0.0068
C303 0.0068
C302 0.0068
C301 0.0068
VR301 5KB
VR303 Center 3.8µs
0.5V
1.8V
VR303 Center, 3.8µs
VR303 -%, 4.1µs
VR303 +%, 3.6µs
IC301
AN6682
PITCH CONTROL
6.5V
Pitch control ±0 % adjustment
CN102
CN103
PITCH CONTROL
VR303 20KB
S301 Reset
VR302 20KB
Pitch control gain adjustment
D401
SVDGL-9NG2
PITCH INDICATOR
Brake adjustment
R211 10K
R214 22K
R215 4.7K
VR201 50KB
C214 16V 100
D204 MA150
0.9V
33rpm--10ms
45rpm--7.3ms
D204
MA150
C209 16V 100
C217 0.1
C219 0.1
Q202
2SD637
LED DRIVER
R213 1.2K
R212 150
D201
D202
S203
S201
S202
S/S
33
45
D201,202
SVDPR3902S-9
SPEED INDICATOR
D203
D205
D204
D206
D203 ~ 206
SVDSLH54VT3
STROBE
C212 50V 3.3
C211 0.047
C206 50V 1
C205 6.3V 220
C202
R207 56K
R206 18K
R208 220K
C210
R209 0.22
330K
R210 18K
R204 2.7K
C204 0.047
R205 120K
S/s push
START
STOP
10V
5V
VO PD FAD FAI ECR M S.S T BI FGG FGD FGI
FNC SRB VCC VCN GND 33 45 OS1 OS2 FO FI INT
IC201 AN6680 CONTROL
C213 470P
Q201
2SC184
REGULAT
4.193MH
R222 K201
C208 22P 390
C207 100P

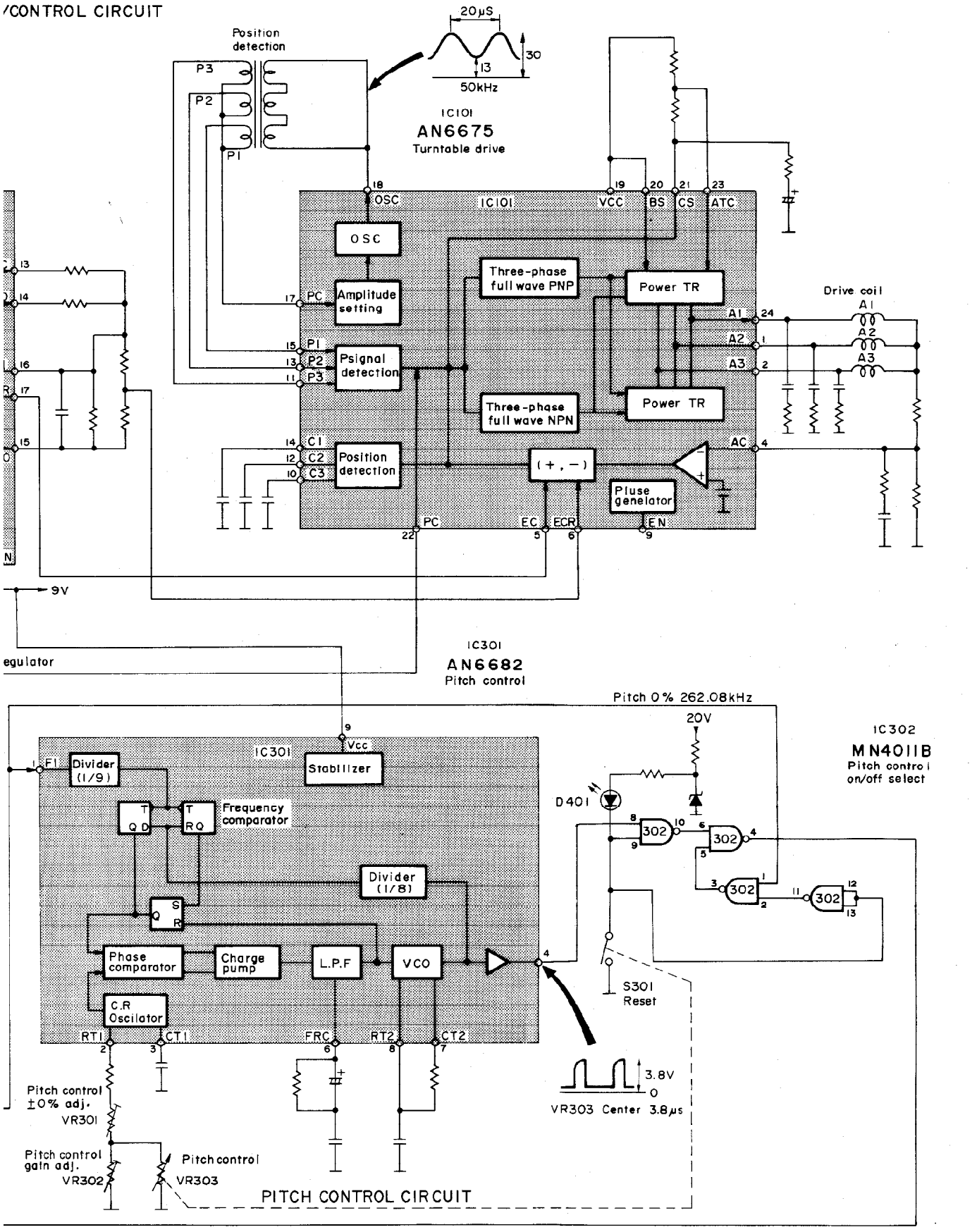

Q2,3
2SD637
REGULATOR
Q1
2SD1265
REGULATOR
Q203
2SC1328
FG AMP.
D2
MA1051M
5.1V ZENER
IC101 AN6675 TURNTABLE DRIVE
Q201
2SC1846
REGULATOR
4.193MHz
ROTATION
S301-OFF
S301-ON
50kHz
20μs
CN101
PL1
R401 1.5K
S401
STYLUS ILLUMINATOR
Stylus illuminator switch
D206

T3

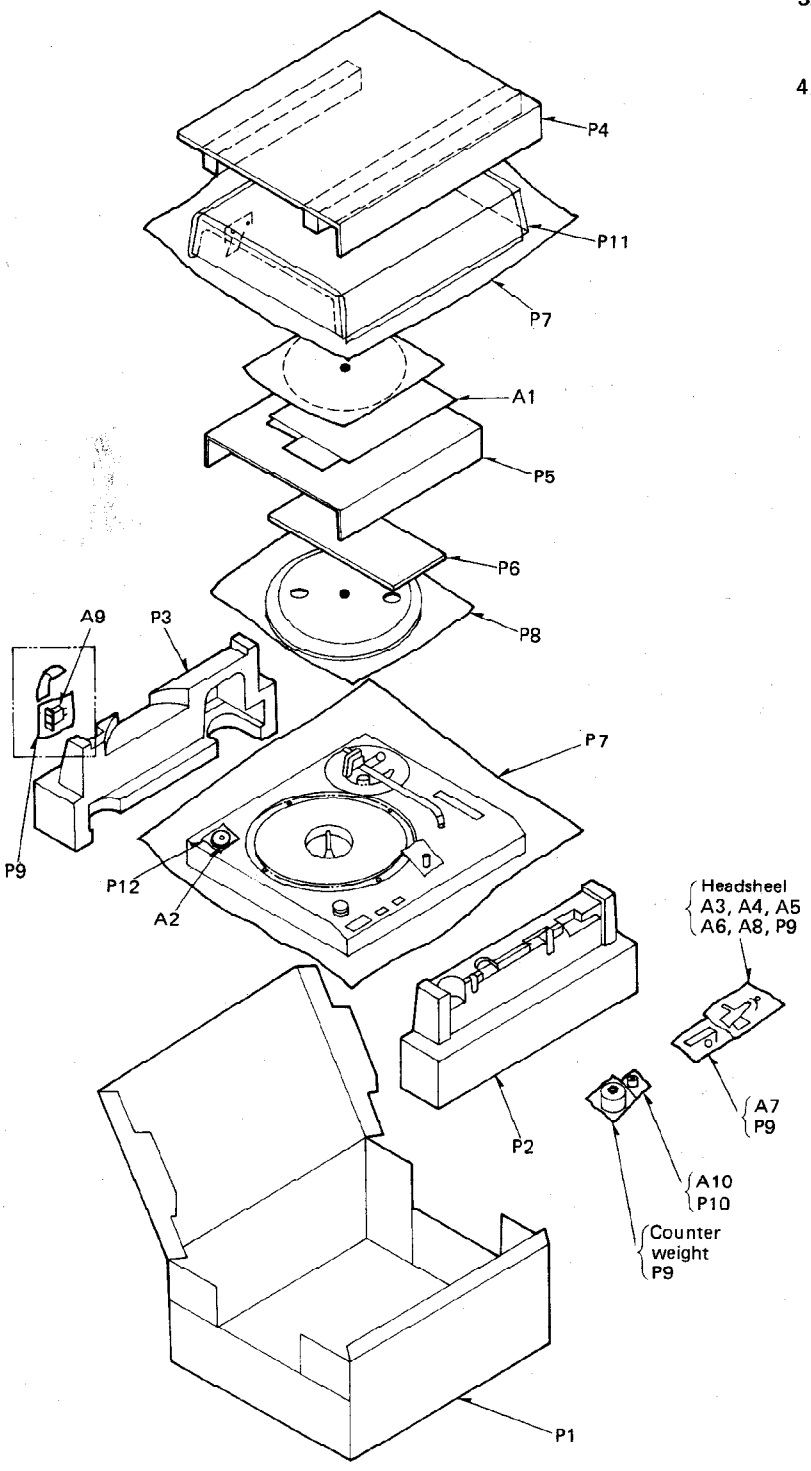
■ BLOCK DIAGRAM



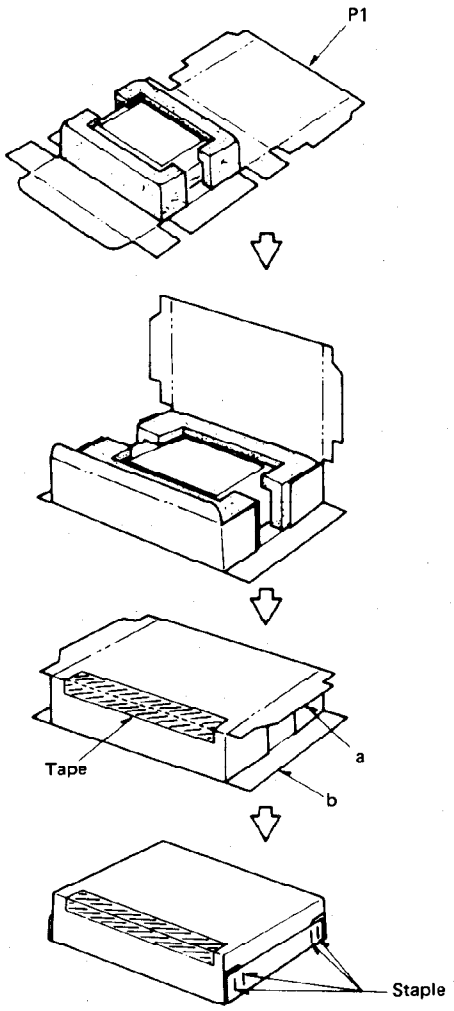
/CONTROL CIRCUIT



■ PACKING



1. Plase the unit (with cushions attached) as illustrated.
2. Fold the flaps according to the line marks.
3. Seal the top with adhesive tape.
   * Use gum tape or adhesive cloth tape of 50mm wide at least
4. For the edges, first fold the flap "a" and then flap "b", and staple. Remember to staple only flap "b". (Use 15 or 16mm staple)



* Stapling positions are shown below.